

# **ACCOUNTING**

## Associate in Applied Science (AAS) Program Code: 10-101-1 **Total Credits: 60**

Mid-State's Accounting program is ideal for students with strong logic and attention to detail. Graduates are prepared for entry-level positions in exciting business and industry settings as well as public accounting firms. The program provides stimulating cooperative learning activities, some taking you outside the classroom for realworld experience. Class activities include hands-on income tax and payroll projects, computerized simulations, and guest lectures.

Estimated tuition and fees: mstc.edu/programcosts

#### ACADEMIC ADVISOR

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s) Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910

MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481

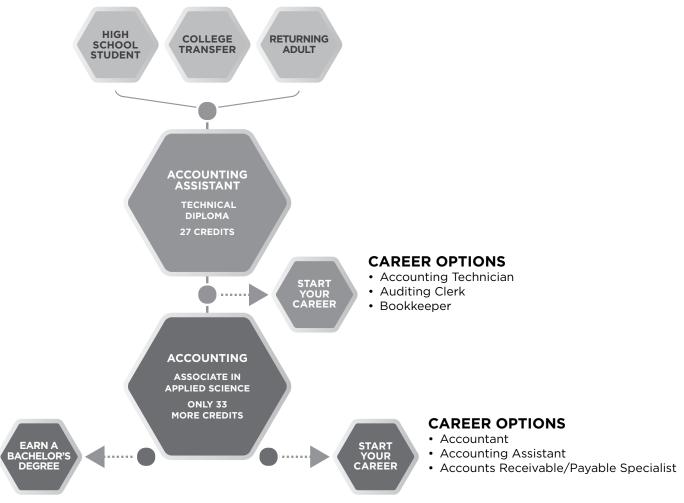
WISCONSIN RAPIDS CAMPUS 500 32nd Street North

Wisconsin Rapids, WI 54494

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### PROGRAM OUTCOMES

Employers will expect you, as an Accounting graduate, to be able to:

- Process financial transactions throughout the accounting cycle.
- Analyze financial and business information to support planning and decision making.
- Perform payroll preparation, reporting, and analysis tasks.
- Perform cost accounting preparation, reporting, and analysis tasks.
- Perform individual and/or organizational tax accounting preparation, reporting, and analysis tasks.
- · Identify internal controls to reduce risk.
- Manage accounting data through advanced spreadsheet applications.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will be assessed on the TSA outcomes in the Accounting Capstone and Cost Accounting courses.

NOTES:	

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success &

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## **SAMPLE FULL-TIME CURRICULUM OPTION**

Term 10101120 10101140 10102101 10103106 10801136	Payroll Accounting  Accounting 1  Intro to Business  Microsoft Office-Introduction  English Composition 1  Introduction International International International Introduction International I	15 credits 3 3 3 3 3 3
<b>Term</b> 10101106 10101123 10101129 10101142 10804107 10804189	Excel for Accounting Income Tax Accounting QuickBooks Applications Accounting 2 & College Mathematics & -or- Introductory Statistics &	15 credits
Term 10101110 10101128 10101141 10102104 10102110 10809195	Intermediate Accounting 1 Managerial Finance Business Taxation Business Law & -or- Employment Law Economics &	15 credits
Term 10101125 10101158 10101159 10801196 10801198 10809122 10809172 10809188 10809198	Cost and Managerial Accounting Accounting Capstone -or- Accounting Internship Oral/Interpersonal Communication ( Speech & Intro to American Government & -o Introduction to Diversity Studies & Intro to Sociology & Developmental Psychology & -or- Intro to Psychology &	3 <b>or-</b>
		credits 60

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## SAMPLE PART-TIME CURRICULUM OPTION

<b>Tern</b> 1010 1010	1140	Accounting 1 & Microsoft Office-Introduction &	6 credits 3 3
Tern 1010 1080	1142	Accounting 2 <b>©</b> English Composition 1 <b>©</b>	6 credits 3 3
	1120	Payroll Accounting  Intro to Business  College Mathematics  Introductory Statistics	9 credits 3 3
<b>Tern</b> 1010	1106 1123	Excel for Accounting Income Tax Accounting  QuickBooks Applications	9 credits 3 3 3
Tern 1010 1010 1010	1110 2104	Intermediate Accounting 1 Business Law & -or- Employment Law	<b>6 credits</b> 3
	1125 1196	Cost and Managerial Accounting Oral/Interpersonal Communication Speech  Developmental Psychology  -or- Intro to Psychology	<b>9 credits</b> 3 <b>2 -or-</b> 3 3
Tern 1010 1010 1080	1124	Business Taxation Managerial Finance Economics 🗗	<b>9 credits</b> 3 3 3
1080	1158	Accounting Capstone -or- Accounting Internship Intro to American Government & -o Introduction to Diversity Studies & Intro to Sociology &	
		lotal	credits 60

## Accounting 1 🗹

## 10101140.....3 credits

A beginning course designed especially for majors or those who need a strong foundation in accounting principles. Develops the accounting cycle of journaling, posting, adjusting, closing, and reporting. Also emphasizes service and merchandising sole proprietorships in developing the accounting cycle. Explores issues for accounting for cash, accounts and notes receivable, inventories, and fixed assets.

## Accounting 2 2

#### 10101142 ......3 credits

Studies accounting procedures for partnerships and corporations. Issues involving incorporation are reviewed. Accounting procedures for corporate stock, dividends, retained earnings, bonds, and long-term investments are presented. Analysis of financial statements is introduced and statements of cash flows are prepared.

Prerequisite: Accounting 1 10101140; Corequisite: Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123

## Accounting Capstone

#### 10101158 ......3 credits

This project based course gives students the opportunity to demonstrate technical competency in areas covered in program courses. Financial accounting, management accounting, payroll accounting, and tax accounting are used. The project simulates many of the tasks students are expected to perform as accounting professionals. Prerequisites: Intermediate Accounting 1 10101110, QuickBooks Applications 10101129, Income Tax Accounting 10101123 and Payroll Accounting 10101120

## Accounting Internship

#### 10101159 ......3 credits

Opportunity for students to apply accounting or business skills in a real-life business environment. Activities may include working with accounts receivable and accounts payable, bank and account reconciliations, accounts payable preparation, spreadsheet work and development, preparing and analyzing financial reports, tax return preparation, processing payroll, job costing, general ledger accounting, and other business-related duties as requested by the employer.

Prerequisites: Intermediate Accounting 1 10101110, QuickBooks Applications 10101129, Income Tax Accounting 10101123, Payroll Accounting 10101120, and Instructor Consent

#### Business Law &

#### 10102104.....3 credits

Introduces the basic foundation of laws and regulatory systems applicable to the business environment. Students examine the UCC, contract torts, agency law, and business and cybercrime. Students apply business legal theory in conjunction with ethical decision making through practical application.

#### **Business Taxation**

#### 10101141.....3 credits

A study of federal income taxation as applicable to C corporations, S corporations, limited liability companies, partnerships, estates and trusts. Both taxable entities and flow-through entities will be considered. Specific attention will be given to general concepts, tax return form preparation, and research.

Prerequisites: Accounting 1 10101140 and Income Tax Accounting 10101123

## College Mathematics &

## 10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Cost and Managerial Accounting

#### 10101125 .....3 credits

Accumulates production costs for materials, labor, and overhead for job order or process costing systems. Determines and records variances from standard. Computes various cost-volume-profit relationships for control and decision making.

Prerequisite: Accounting 2 10101142

## Developmental Psychology ☑

## 10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Economics &

#### 10809195 .....3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **Employment Law**

#### 10102110 ......3 credits

Introduces a broad scope of employment laws and provides the opportunity to apply these laws to the employment arena. Includes laws relating to anti-discrimination, including the Civil Rights Act, ADEA, and ADA; wage and hour regulation, including FLSA; employer-provided pensions, including ERISA; health insurance, including COBRA and ACA; and unemployment and worker's compensation insurance.

## English Composition 1 2

## 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **Excel for Accounting**

## 10101106.....3 credits

Microsoft Excel is a vital tool for many accounting tasks. This course covers basic and advanced features within Excel and relates them to various accounting tasks. Using Excel, students will perform accounting tasks and will experience the gathering, analysis, and reporting of accounting data. *Prerequisites: Accounting 1 10101140 and Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123* 

## Income Tax Accounting ©

#### 10101123 ......3 credits

Applies current tax laws in preparing individual tax returns and supporting forms and schedules.

## Intermediate Accounting 1

#### 10101110.....3 credits

This course builds upon financial accounting concepts covered in Accounting 1 and Accounting 2. Topics include the conceptual framework as the basis of developing accounting guidance, multi-purpose financial statements, short and long-term assets,time value of money concepts, revenue recognition, and an overview of auditing concepts. *Prerequisite: Accounting 2 10101142* 

## Intro to American Government 🗹

10809122......3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Business 🗹

#### 10102101.....3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

## Intro to Psychology 2

#### 10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Sociology &

#### 10809196 ......3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Introduction to Diversity Studies & 10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender. class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Introductory Statistics & 10804189 .....3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers. perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent.

## **Managerial Finance**

10101128 ......3 credits

Focuses on the corporate finance function including role of corporate finance professionals, time value of money, cost of capital, valuation, capital structure, and capital budgeting issues. Students will also be introduced to capital budgeting analysis, cost-volume-profit analysis, profit planning, and differential analysis. Prerequisite: Accounting 2 10101142

## 

10103106 ......3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse, and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

## Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Payroll Accounting &

10101120 ......3 credits

Develops a working knowledge of payroll legislation, payroll records, and payroll accounting. Payroll accounting is accomplished through manual methods and automated methods.

Corequisites: Accounting 1 10101140 and Microsoft Office-Introduction 10103106

## **QuickBooks Applications**

10101129 ......3 credits

Uses the computer as a tool to reinforce and build on accounting concepts. Students prepare financial statements and managerial reports, produce business documents, and account for service and merchandising business entities. Prerequisites: Accounting 1 10101140; Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123

## Speech 2

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.



# **ACCOUNTING ASSISTANT**

Technical Diploma
Program Code: 31-101-1
Total Credits: 27

The Accounting Assistant program at Mid-State is ideal for students with strong logic and attention to detail. The program develops financial and managerial accounting skills and an understanding of financial reporting. Students also learn critical aspects of budgeting and technology as well as communication skills to be successful in their role. Students in the program will develop the skills needed to record, post, and reconcile accounting data in the areas of accounts payable, accounts receivable, sales, purchasing, budgeting, and payroll. They will also learn to summarize and report financial information, and provide support within the financial functions of an organization. Students also gain basic tax preparation skills. Includes cooperative learning activities that provide real-world experiences, both inside and outside the classroom.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

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CHECKLISI.
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- ☐ Financial Aid Form(s)
  - Form(s): \_\_\_\_\_
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Where: \_\_\_\_\_

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- Other:

mstc.edu 888.575.6782 TTY: 711





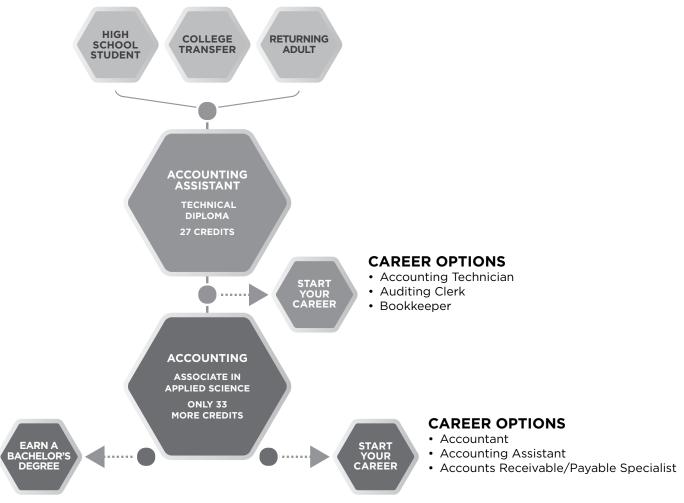
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Marshfield, WI 54449 Stevens Point, WI 54481 Wisconsin Rapids, WI 54494

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## Intro to College Writing

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## **Pre-Algebra**

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#### SAMPLE FULL-TIME CURRICULUM OPTION 12 credits **Term** 10101120 Payroll Accounting Z 3 10101140 3 Accounting 1 2 10103106 Microsoft Office-Introduction Z 3 10801136 English Composition 1 3 15 credits **Term** 10101106 **Excel for Accounting** 10101123 Income Tax Accounting Z 3 10101129 QuickBooks Applications 3 10101142 Accounting 2 Z 3 10804107 College Mathematics &

**Total credits 27** 

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## College Mathematics &

#### 10804107 ......3 credits

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Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

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## Income Tax Accounting ☑

## 10101123 ......3 credits

Applies current tax laws in preparing individual tax returns and supporting forms and schedules.

## Microsoft Office-Introduction &

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## Payroll Accounting ${\bf Z}$

## 10101120 ......3 credits

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Corequisites: Accounting 1 10101140 and Microsoft Office-Introduction 10103106

## **QuickBooks Applications**

## 10101129 ......3 credits

Uses the computer as a tool to reinforce and build on accounting concepts. Students prepare financial statements and managerial reports, produce business documents, and account for service and merchandising business entities. Prerequisites: Accounting 1 10101140; Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123



# ADMINISTRATIVE PROFESSIONAL

Associate in Applied Science (AAS)
Program Code: 10-106-6
Total Credits: 61-62

Graduates of Mid-State's Administrative Professional program are known for being adaptable and well prepared for today's workforce. Students learn to create and edit correspondence, work with customers, develop research reports, handle private or confidential records, and more. The program emphasizes fundamental knowledge of software applications, customer service skills, and the expert operation of a variety of office technology and equipment. You'll experience hands-on learning through the organization of high-profile events.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where:

When:\_\_\_\_\_

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





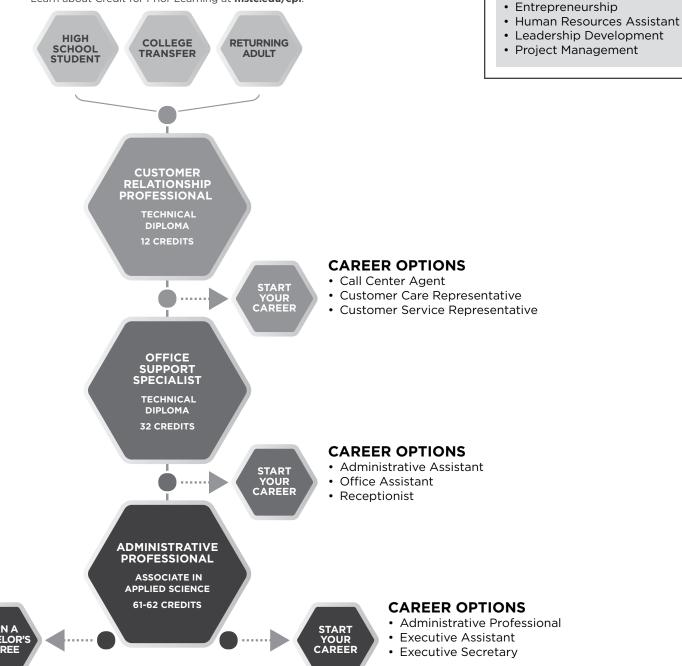
**ADAMS CAMPUS** 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

500 32nd Street North Wisconsin Rapids, WI 54494

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

OTHER OPTIONS

**RELATED PROGRAMS** 

• Business Management

#### **PROGRAM OUTCOMES**

Employers will expect you, as an Administrative Professional graduate, to be able to:

- Demonstrate effective workplace communications.
- Apply technology skills to business and administrative tasks.
- Perform routine administrative procedures.
- Manage administrative projects.
- · Maintain internal and external relationships.
- Model professionalism in the workplace.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Administrative Professional program outcomes are measured in the TSA-designated courses Administrative Office Procedures and Supervised Field Experience.

#### MOBILE DEVICE ENHANCEMENT

To support your hands-on learning and give you an edge in today's digital workplace, Administrative Professional program students are required to purchase an iPad device. Students accepted into the program will receive specific details about purchasing the mobile device (financial aid available).

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success 🗷

and is a graduation requirement.

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits

.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10103106 10106106 10106157 10801136 10809172	Microsoft Office-Introduction* © Quality Customer Service* Document Formatting © English Composition 1* © Introduction to Diversity Studies* ©	3 3 3 3 3 3
Term 10103114 10103125 10106140 10106150 10106158 10106172 10801196 10801198	Word-Intermediate*  Excel Applications* Business Information Management Administrative Office Procedures Proofreading & Editing  Digital Communication Technology Oral/Interpersonal Communication*  Speech*	edits 1 2 3 3 2 3 3
Term 10102101 10106162 10804107 10804118 10804189 10809122 10809196	Intro to Business* © Graphics & Print Media College Mathematics* © -or- Intermediate Algebra with Applications* © -or- Introductory Statistics* © Intro to American Government* © -or- Intro to Sociology* © Elective*	3 3 3
Term 10102130 10104107 10106135 10106180 10809188 10809198	Career Development*  Social Media Marketing Supervised Field Experience Advanced Software Applications Developmental Psychology*  Total credits 6	3 3 2 3

<sup>\*</sup> This course may also be offered in a different term including during winterim or summer terms, with 3-week, 8-week, or 16-week sessions available. A variety of modalities and class lengths may be available, including online, hybrid, TelePresence, or face to face.

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This program can be completed entirely online.
- Students complete a full-time course load over a 16-week term.
   This term may include a combination of classes taken in an 8-week session and classes taken over the full 16-week term.
- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10103106 10106157 10809172	Microsoft Office-Introduction*   Document Formatting  Introduction to Diversity Studies*	9 credits 3 3 3
<b>Term</b> 10106106 10106158 10801136	Quality Customer Service* Proofreading & Editing & English Composition 1* &	8 credits 3 2 3
<b>Term</b> 10103114 10103125 10801196 10801198	Word-Intermediate* &  Excel Applications*  Oral/Interpersonal Communication*  Speech* &	6 credits 1 2 2 -or- 3
<b>Term</b> 10106140 10106150 10106172	Business Information Management Administrative Office Procedures Digital Communication Technology	9 credits 3 3 3
<b>Term</b> 10102101 10106162 10809122 10809196	Intro to Business* & Graphics & Print Media Intro to American Government* & -o Intro to Sociology* &	9 credits 3 3 r-
<b>Term</b> 10102130 10801199 10104107 10106180	Career Development* & Employment Strategies* Social Media Marketing Advanced Software Applications	9 credits
<b>Term</b> 10804107	6 College Mathematics*	-7 credits
10804118	<b>-or-</b> Intermediate Algebra with Application	
10804189	-or- Introductory Statistics*    Elective*	3 3
<b>Term</b> 10106135 10809188 10809198	Supervised Field Experience Developmental Psychology* & -or- Intro to Psychology* &	5 credits 2 3
	Total cred	dits 61-62

## **Administrative Office Procedures**

10106150 ......3 credits

Develops professional skills and attitudes needed in a global business environment. Skills include time management, problem solving, and decision making while working independently and as part of a team. Tasks such as electronic mail, calendaring, meeting and event planning, domestic and international travel, and minute-taking are included.

Corequisites: English Composition 1 10801136 and Microsoft Office-Introduction 10103106

#### **Advanced Software Applications** 10106180 ......3 credits

Integrates multiple advanced software applications by utilizing concepts such as importing/exporting, linking/ embedding, and copying/pasting. Students manage information and apply critical thinking skills to create professional documents simulating real-world projects. Prerequisites: Microsoft Office-Introduction 10103106. Word-Intermediate 10103114, Excel Applications 10103125, and Document Formatting 10106157

## **Business Information Management**

10106140.....3 credits

Following commonly-used ARMA rules, the student applies basic filing methods to paper and database filing systems. Corequisite: Microsoft Office-Introduction 10103106

## Career Development 2

10102130 ......3 credits

Prepares learners for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview: and demonstrate how to deal with interpersonal situations found in a work environment. NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor, program faculty, program counselor, or department dean/associate dean to register.

## College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meetthese requirements.

## Developmental Psychology &

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **Digital Communication Technology**

10106172 ......3 credits

Introduces the student to digital and communication technology used in the office today, including digital cameras, digital video cameras, video conferencing, and multimedia presentations. The content focuses on understanding communication technologies and how they impact employees.

Corequisite: Microsoft Office-Introduction 10103106

## **Document Formatting** 10106157 .....3 credits

Students are able to format styles of business letters, business and academic reports, memos, tables, business meeting documents, itineraries, legal documents, and business forms. Also includes drill work for improving keying speed and accuracy. Minimum typing speed of 30 wpm required (alphabetic keys only).

Corequisite: Microsoft Office-Introduction 10103106

## English Composition 1 2

## 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

## **Excel Applications**

## 10103125.....2 credits

Learners will expand on basic Excel skills including managing multiple workbooks and worksheets using 3D references, links, and hyperlinks. They will also learn to summarize and analyze data using subtotals, PivotTables, PivotCharts, Goal Seek, Solver and Scenario Manager tools. This course teaches students to gather data and turn it into meaningful information used for business decision-making. Prerequisites: Microsoft Office Introduction 10103106 or Excel Beginning 10103123

## **Graphics & Print Media**

10106162 ......3 credits

Develops skill to effectively create graphics and design publications. Students produce print media, design, and layout print jobs using the most appropriate software package for the job.

Corequisite: Microsoft Office Introduction 10103106

## Intermediate Algebra with Applications & 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to American Government & 10809122.....3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Business 2

## 10102101.....3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

## Intro to Psychology 2

10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Sociology &

10809196 ......3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Introduction to Diversity Studies & 10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Introductory Statistics &

10804189 .....3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Microsoft Office-Introduction ☑

10103106 .....3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

# Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Proofreading & Editing ©

10106158 ......2 credits

Sharpens proofreading and editing skills. Competencies include detecting and editing errors in keying, spelling, capitalization, plurals, possessives, punctuation, numbers, grammar, sentence structure, and formatting. Documents are edited for clarity, conciseness, and completeness. *Corequisite: Microsoft Office-Introduction 10103106* 

## Quality Customer Service

10106106.....3 credits

Addresses sensitivity in communicating with customers and co-workers. Includes international communications, teamwork, working relationships, and telephone skills.

## **Social Media Marketing**

10104107 .....3 credits

Addresses how social media has transformed marketing communications from traditional mass media to individualized marketing. Using a variety of social media tools and platforms, this class explores the different methodologies for social media marketing. Topics include creating social media, integrating social media as part of a marketing campaign, the concept of viral marketing, measuring social media success through analytics, and how organizations and individuals have successfully applied this form of marketing.

## Speech 2

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Pre-requisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Supervised Field Experience

10106135 .....2 credits

This course integrates Administrative Professional classroom study with specific off-campus occupational experiences at selected training sites. An organized plan of experiences built around office competencies is planned, supervised, and evaluated by the instructor and cooperating business trainer. Prerequisite: Completion of at least 24 credits of Computer Software 10-103 and/or Administrative Professional 10-106 courses or consent of instructor.

## **Word-Intermediate ☞**

10103114 .....1 credit

Students learn to create more complex documents using Microsoft Word as well as customize the Word environment. Students also learn to use mail merge, macros, collaborate with others, and combine information into one file. Prerequisite: Microsoft Office-Introduction 10103106 or Word-Beginning 10103113



# ADVANCED EMERGENCY **MEDICAL TECHNICIAN**

**Technical Diploma** 

Program Code: 30-531-6

**Total Credits: 4** 

Designed for those who possess a valid Wisconsin EMT license, the Advanced Emergency Medical Technician (AEMT) program at Mid-State prepares students with the knowledge and skills needed to work as an entry-level AEMT, with an understanding of the basic and advanced use of equipment found on an ambulance and ability to care for critical and emergent patients.

This program consists of asynchronous lectures, practical skill labs, laboratory simulations, and pre-hospital clinical experiences. Successfully completing it qualifies you to take the National Registry of Emergency Medical Technicians' certification exam required to apply for state licensure. Graduates of the Advanced Emergency Medical Technician technical diploma may advance into either the EMT-Paramedic program or Paramedic Technician program.

Mid-State's Advanced Emergency Medical Technician program prepares students to obtain the required licensure to be employed/ practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examination, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

## CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- ☐ Criminal Background Statement of Understanding and Release of Information Form

Ш	Other:			

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive

WISCONSIN RAPIDS CAMPUS 500 32nd Street North

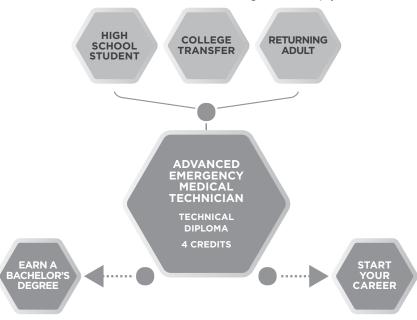
Stevens Point, WI 54481 Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Criminal Justice-Corrections & Community Advocacy
- Criminal Justice-Law Enforcement 720 Academy
- Criminal Justice-Studies
- Emergency Medical Technician
- Emergency Services Management
- EMT-Paramedic
- Fire Protection Technician
- Firefighter Technician
- Paramedic Technician

#### **CAREER OPTIONS**

- Advanced Emergency Medical Technician
- Emergency Department Technician
- · Urgent Care Technician

## **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as an Advanced Emergency Medical Technician graduate, to be able to:

- Meet state competencies for AEMT certification.
- Demonstrate professional behavior.
- · Communicate effectively with others.
- Demonstrate AEMT skills associated with established standards and procedures for a variety of patient encounters.
- Integrate pathophysiological principles and assessment findings to provide appropriate patient care.
- Prepare for incident response and EMS operations.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting during the program orientation on the first day of class.

#### **ADDITIONAL ENTRY CRITERIA**

To apply to the Advanced Emergency Medical Technician program, please submit the following document to Mid-State Admissions:

• Criminal Background Statement of Understanding and Release of Information form.

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as an emergency medical technician is available at mstc.edu/programs/advanced-emergencymedical-technician. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

#### **CLINICAL-RELATED REQUIREMENTS**

Prior to placement at a clinical site, students need to pay for a criminal background check through a private vendor. Students will be required to provide documentation of required health work and current healthcare provider CPR certification via a Blackboard assignment. Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the course and will not be able to advance in the program.

Prior to beginning a clinical experience in a health care agency or ambulance service, students must:

- a. Provide evidence of completion of the required health work.
- b. Hold a Department of Health Services EMS Training Center Training Permit at the AEMT level.

- c. Provide evidence of current CPR at the health care professional level by a CPR organization specified under s. DHS 110.17(1).
- d. Obtain the required uniform for clinical experiences.
- e. Assume responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.

#### PROGRAM PROGRESSION

In order to be eligible to take the National Registry of Advanced Emergency Medical Technician's examination, students must:

• Receive a minimum grade of "C" in all courses within the Emergency Medical Technician program.

#### STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## **Pre-Algebra**

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## **SAMPLE CURRICULUM OPTIONS**

Term 4 credits 30531318 Advanced EMT 4

Total credits 4

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## **COURSE DESCRIPTIONS**

Advanced EMT	
30531318	4 credits

Program graduates will demonstrate competency in the initiation of intravenous therapy, administration of select medications as approved by DHS and local medical directors via intravenous, intramuscular, subcutaneous, sublingual, and inhalation routes. Potential occupations include Emergency Medical Technician, Ambulance Attendant, Firefighter, ER-Technician.

NOTES:	



# AGRIBUSINESS AGRONOMY TECHNICIAN

**Technical Diploma** 

Program Code: 31-006-4

**Total Credits: 26** 

Students in Mid-State's Agribusiness Agronomy Technician program gain a deep understanding of the science and technology of using plants as a source of food. They also acquire the specialized skills needed for precision agriculture applications and regulatory requirements. The program will prepare you to use the latest technology to help farmers yield maximum production from the land. You'll also get hands-on experience producing a crop, keeping pests away, making soil more fertile, marketing commodities, and managing a farm.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

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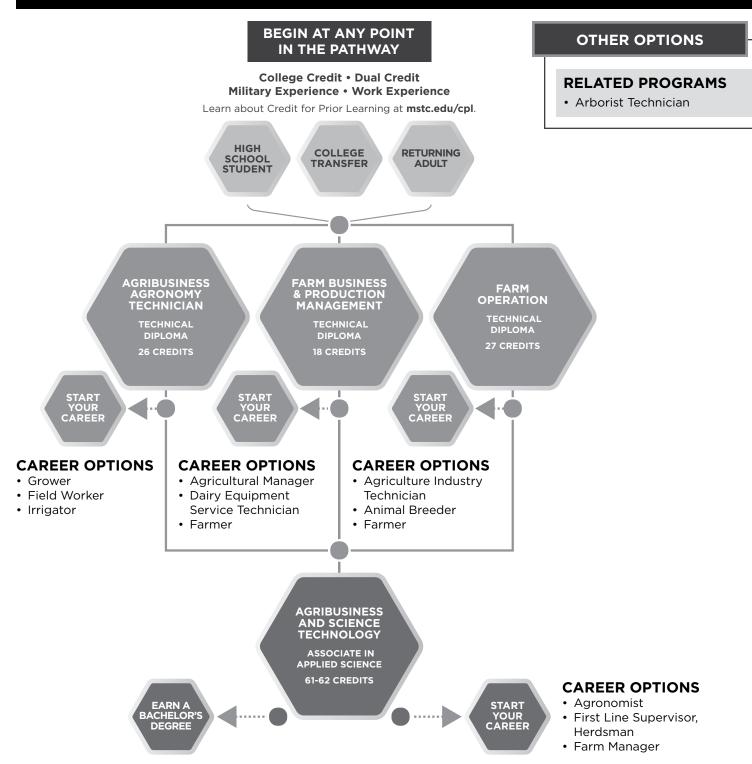




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500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**



#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Platteville, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as an Agribusiness Agronomy Technician graduate, to be able to:

- Develop a crop management plan.
- · Apply relevant technologies.
- Investigate opportunities in agribusiness.
- Interact as a professional in agribusiness.
- Apply economic and marketing strategies to agribusiness industry.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Principles of Crop Management course.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

NOTES:		

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success 🗷

an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10090101 10091103 10093102 10093104	Agriculture Business Management Animal Nutrition Intro to Precision Agriculture Principles of Crop Management  3  3  3	
<b>Term</b> 10006101 10070102	Agricultural Computations 2 3 Precision Equipment Systems 2 2	
10070103 10080105 10093101	Basic Agriculture Electrical, Mechanical, and Irrigation 3 Intro to Soil Science 3 Integrated Pest Management 2 2	
	Total credits 26	

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## **SAMPLE PART-TIME CURRICULUM OPTION**

<b>Term</b> 10091103 10093102	Animal Nutrition Intro to Precision Agriculture	<b>7 credits</b> 4 3
<b>Term</b> 10006101 10080105	5 · · · · · · · · · · · · · · · · · · ·	6 credits 3 3
<b>Term</b> 10090101 10093104	Agriculture Business Management Principles of Crop Management	6 credits 3 3
<b>Term</b> 10070102 10070103 10093101	Precision Equipment Systems & Basic Agriculture Electrical, Mechan and Irrigation Integrated Pest Management &	7 credits 2 ical, 3 2
	Total	credits 26

## **Agriculture Business Management** 10090101.....3 credits

Examines the farm business as a complex set of enterprises that all need to be managed effectively to be successful and sustainable. Students learn to develop a business plan, set short- and long-term goals, identify and implement alternatives for reaching goals. Includes strategies and tools to monitor success. Students also learn to organize and maintain farm business records as well as how to interpret and analyze the records to make sound farm management decisions.

## Agricultural Computations &

10006101.....3 credits

Deals with the application of quantitative tools to support agribusiness management decisions. These management decisions are executed using spreadsheet and data analysis (e.g., Microsoft Excel) while using elementary mathematical tools in an agricultural economics context. This course is designed to prepare students for upper-level agribusiness courses as well as real-world situations in agriculture.

## **Animal Nutrition**

10091103...... 4 credits

Includes classification and function of nutrients, deficiency symptoms, characterization of feedstuffs, and formulation of diets for domestic animals. They are also able to successfully understand the digestive processes of monogastric and ruminant animals.

## Basic Agriculture Electrical, Mechanical, and Irrigation

10070103 ......3 credits

Students learn the fundamentals of electrical and irrigation systems related to agricultural equipment and facilities. Electrical topics discussed include safety precautions, Ohm's law, generators, batteries, electric motors, water heaters, overcurrent protection, conductor sizing, and national electrical code requirements. Irrigation topics include an introduction to irrigation systems which includes the study of systems design, pump selection and repair, safety controls, power units, power requirements, power distribution, and basic electrical concepts of irrigation systems.

## Integrated Pest Management &

10093101.....2 credits

An effective and environmentally sensitive approach to pest management. Learners explore various approaches in integrated pest management (IPM) and gather information on the life cycles of pests and their interactions with the environment. This information in combination with available pest control methods are used to identify the most economical pest management options, with the least possible hazard to people, property, and environment.

## **Intro to Precision Agriculture**

10093102 .....3 credits

Explores agricultural applications of GPS, yield monitoring systems, and mapping. Students learn to interpret maps generated by precision agriculture equipment. Learners experience setup, calibration and operation of equipment/ software designed to support the production crop industry.

## Intro to Soil Science

10080105.....3 credits

Designed to provide students with fundamental knowledge of soil and soil composition. Includes study of soil types, formation factors, physical properties, biological properties, and basic soil chemistry. Units covering tillage, conservation, pH, soil management, plant nutrients, and fertilizer sources are also included. Students gain the skills required to interpret soil test reports and soil survey maps and recognize qualities of various soil types. Students perform soil sampling, residue measurements, compaction assessments, and soil loss determinations per crop rotation guidelines. A nutrient management plan is created and analyzed.

## Precision Equipment Systems & 10070102 ......2 credits

Provides experience with different precision farming GPS systems used on agriculture equipment. Students learn proper setup, calibration, and installation of the systems. Students also create and interpret maps and learn adjustments and settings as well as GPS display and the different functions related.

## **Principles of Crop Management** 10093104 ......3 credits

The basic principles and concepts of sound agronomic practices are discussed for corn, soybeans, small grains, and forage crops grown in Wisconsin. All sound agronomy practices are emphasized for each crop area as it relates to cultural and other specific inputs of crop production, environmental factors, and sustainable systems.



# AGRIBUSINESS AND SCIENCE TECHNOLOGY

Associate in Applied Science (AAS) Program Code: 10-006-2

**Total Credits: 61-62** 

Mid-State's Agribusiness and Science Technology program prepares students to be owners or employees of a farm business in all sectors of the agriculture industry or work in businesses that support the agriculture industry. The program includes dairy and livestock management and traditional crop production. You'll learn to develop a nutrient management plan, calculate cost of production, and develop a long-term facility and equipment plan as well as a farm business plan. Hands-on experiences include taking soil samples; identifying diseases, insects, and weeds that impact profitability; and working with livestock nutrition and management. Graduates obtain a private pesticide applicators certificate.

Estimated tuition and fees: mstc.edu/programcosts

## **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s) Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With: Official Transcripts

- Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711



MID-STAT

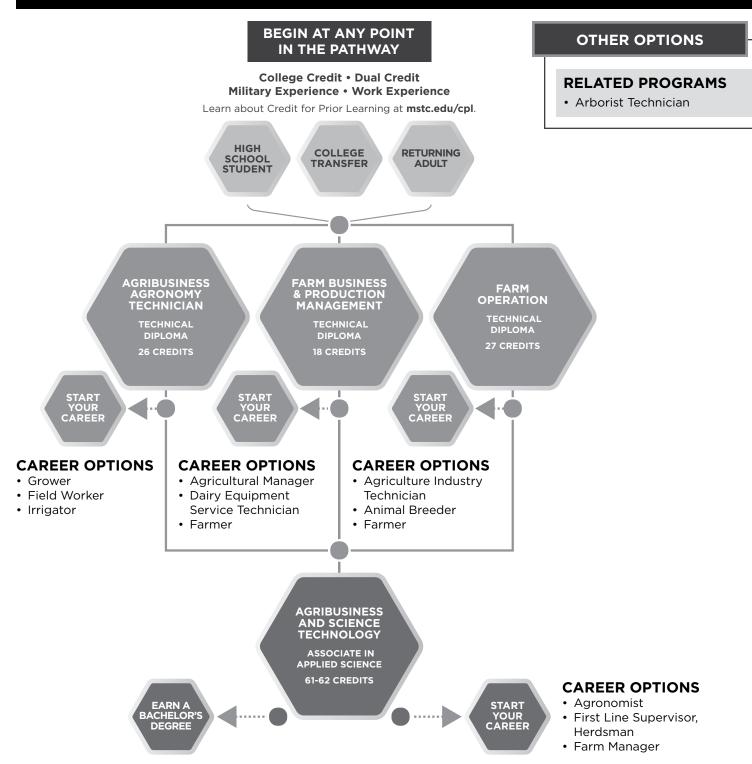
**ADAMS CAMPUS** 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481

WISCONSIN RAPIDS CAMPUS 500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**



#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Platteville, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as an Agribusiness and Science Technology graduate, to be able to:

- Create a crop management plan.
- Develop an agribusiness management plan.
- Apply economic and marketing strategies to agribusiness industry.
- · Apply relevant technologies.
- · Create a livestock management plan.
- Investigate opportunities in agribusiness.
- Interact as a professional in agribusiness.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in Principles of Crop Management, Agribusiness Financial Analysis, Agriculture Business Management, Intro to Animal Science, and Intro to Precision Agriculture.

NOTES:			

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success &

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10006105 10080105 10091102 10093101 10804107	Agribusiness Financial Analysis Intro to Soil Science Intro to Animal Science Integrated Pest Management & College Mathematics & -or-	2 3 3 2 3
10804118	Intermediate Algebra with Applications 🗹	4
Term	17 cre	dits
10070103 10093102 10091103 10801136 10806114	Basic Agriculture Electrical, Mechanical, and Irrigation Systems Intro to Precision Agriculture Animal Nutrition English Composition 1 & General Biology	3 3 4 3 4
Term	14 cre	dits
10006104	Intro to Agriculture Engineering Technology	3
10070102	Precision Equipment Systems	2 3 3
10090101	Agriculture Business Management Principles of Crop Management	3
10801196	Oral/Interpersonal Communication 🗹 -or-	
10801198	Speech 🗹	3
Term	17 cre	dits
10003101	Agricultural Diesel Engine Systems	3
10006101	Agricultural Computations &	3
10006102	Agribusiness Equipment & Facilities Introduction to Food Science	3 2 3
10809166	Intro to Ethics: Theory & Application &	3
10809188	Developmental Psychology 🗹 -or-	
10809198	Intro to Psychology 🗹	3
	Total credits 61	-62

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## **SAMPLE PART-TIME CURRICULUM OPTION**

<b>Term</b> 10080105 10091102	Intro to Soil Science Intro to Animal Science	6 credits 3 3
<b>Term</b> 10091103 10093102	Animal Nutrition Intro to Precision Agriculture	<b>7 credits</b> 4 3
<b>Term</b> 10090101 10093104	Agriculture Business Management Principles of Crop Management	6 credits 3 3
<b>Term</b> 10006101 10006102 10003101	Agricultural Computations & Agribusiness Equipment & Facilities Agricultural Diesel Engine Systems	8 credits 3 2 3
<b>Term</b> 10006105 10093101 10801136	Agribusiness Financial Analysis Integrated Pest Management & English Composition 1 &	7 credits 2 2 2 3
Term		10 credits
10070103 10801196 10801198 10806114	Basic Agriculture Electrical, Mechani and Irrigation Systems Oral/Interpersonal Communication of Speech of General Biology	3
<b>Term</b> 10006104 10070102 10804107	Intro to Agriculture Engineering Techr Precision Equipment Systems & College Mathematics & -or-	2 3
10804118	Intermediate Algebra with Application	ons 🗹 4
<b>Term</b> 10006103	Introduction to Food Science	9 credits
10809166 10809188	Intro to Ethics: Theory & Application Developmental Psychology & -or-	3
10809198	Intro to Psychology &	3
	Total cre	dits 61-62

## **Agribusiness Equipment & Facilities** 10006102.....2 credits

Examines arrangement and design of efficient farm buildings and equipment as well as construction requirements. Farmstead planning includes mapping of present facilities as well as evaluating usefulness and planning long and shortrange goals for farmstead changes to improve economics, safety, efficiency and aesthetics. Environmental factors and animal wellness needs are identified, including space. ventilation, nutrition, and care. Also examines the appropriate use and care of feed, fertilizer, planting and harvesting equipment, and dairy and livestock equipment and facilities. Possible equipment/facility changes are discussed and business expansion is analyzed.

## **Agribusiness Financial Analysis** 10006105.....2 credits

This course provides the student opportunities to develop necessary business skills for operating a successful farm business. These skills involve analyzing, evaluating, creating and decision-making. These skills will be used with balance sheets, Income & Expense projections, cash flow needs, budget creation, benchmarking, cost of production, inventories, credit needs and history along with loan decisions.

## Agricultural Computations 10006101.....3 credits

Deals with the application of quantitative tools to support agribusiness management decisions. These management decisions are executed using spreadsheet and data analysis (e.g., Microsoft Excel) while using elementary mathematical tools in an agricultural economics context. This course is designed to prepare students for upper-level agribusiness courses as well as real-world situations in agriculture.

## **Agricultural Diesel Engine Systems** 10003101.....3 credits

Students learn the different uses of diesel engines in an agricultural setting. This course also provides an introduction to fuel systems, exhaust systems, and electrical systems. Use of technical service resources and precision measuring is stressed.

#### **Agriculture Business Management** 10090101.....3 credits

Examines the farm business as a complex set of enterprises that all need to be managed effectively to be successful and sustainable. Students learn to develop a business plan, set short- and long-term goals, identify and implement alternatives for reaching goals. Includes strategies and tools to monitor success. Students also learn to organize and maintain farm business records as well as how to interpret and analyze the records to make sound farm management decisions.

## **Animal Nutrition**

10091103 ...... 4 credits

Includes classification and function of nutrients, deficiency symptoms, characterization of feedstuffs, and formulation of diets for domestic animals. They are also able to successfully understand the digestive processes of monogastric and ruminant animals.

## Basic Agriculture Electrical, Mechanical, and **Irrigation Systems**

10070103 .....3 credits

Students learn the fundamentals of electrical systems related to agricultural equipment and facilities. This course also builds an understanding of the AC electrical circuits used in today's agricultural businesses. Students use digital multi-meters to diagnose common electrical problems found in agricultural electrical circuits, equipment, and motors. Topics discussed include safety precautions, Ohm's law, generators, batteries, electric motors, water heaters, overcurrent protection, conductor sizing, and national electrical code requirements.

## College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Developmental Psychology &

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## English Composition 1 2

#### 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

## **General Biology**

#### 10806114 ...... 4 credits

Introduces general biological concepts and principles. Emphasis is on cell structure and function, genetics, evolution, and taxonomical relationships. Consideration is also given to diversity among the various kingdoms.

## Integrated Pest Management &

## 10093101.....2 credits

An effective and environmentally sensitive approach to pest management. Learners explore various approaches in integrated pest management (IPM) and gather information on the life cycles of pests and their interactions with the environment. This information in combination with available pest control methods are used to identify the most economical pest management options, with the least possible hazard to people, property, and environment.

#### Intermediate Algebra with Applications & 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **Intro to Agriculture Engineering Technology** 10006104.....3 credits

Studies engineering concepts and principles as they apply to farm power and machinery, electrical energy and processing, structures and environment, irrigation and drainage, and food engineering. Students are exposed to techniques in design, planning, construction, and performance evaluation.

## Intro to Animal Science

## 10091102 ......3 credits

Introduces the basics of livestock management. Examines management of dairy, beef, sheep, and other common livestock with concentration on nutrition, feedstuff's classification, reproduction, genetics, animal behavior, animal health, and sustainable agriculture practices. Includes basic husbandry and care procedures for animals. A livestock management plan will be created and analyzed.

## Intro to Ethics: Theory & Application & 10809166 .....3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **Intro to Precision Agriculture**

#### 10093102 .....3 credits

Explores agricultural applications of GPS, yield monitoring systems, and mapping. Students learn to interpret maps generated by precision agriculture equipment. Learners experience setup, calibration and operation of equipment/ software designed to support the production crop industry.

## Intro to Psychology & 10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Soil Science

10080105.....3 credits

Designed to provide students with fundamental knowledge of soil and soil composition. Includes study of soil types, formation factors, physical properties, biological properties, and basic soil chemistry. Units covering tillage, conservation, pH, soil management, plant nutrients, and fertilizer sources are also included. Students gain the skills required to interpret soil test reports and soil survey maps and recognize qualities of various soil types. Students perform soil sampling, residue measurements, compaction assessments, and soil loss determinations per crop rotation guidelines. A nutrient management plan is created and analyzed.

# Introduction to Food Science 10006103.....3 credits

Offers students unique opportunities to learn where their food supply comes from, how the food is produced, and how consumption is met on a global basis. Applying science principles to food production will enhance the student's ability to understand the phenomena of food production.

# Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Precision Equipment Systems & 10070102 ......2 credits

Provides experience with different precision farming GPS systems used on agriculture equipment. Students learn proper setup, calibration, and installation of the systems. Students also create and interpret maps and learn adjustments and settings as well as GPS display and the different functions related.

# Principles of Crop Management 10093104 ......3 credits

The basic principles and concepts of sound agronomic practices are discussed for corn, soybeans, small grains, and forage crops grown in Wisconsin. All sound agronomy practices are emphasized for each crop area as it relates to cultural and other specific inputs of crop production, environmental factors, and sustainable systems.

# Speech 2 10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.



# ARBORIST TECHNICIAN

Associate in Applied Science (AAS)

Program Code: 10-001-5

**Total Credits: 62-63** 

Mid-State's Arborist Technician graduates enter the workforce with real-world knowledge and skills. Our students learn the fundamentals of pruning, plant health care, tree planting and maintenance, plant identification, and tree risk assessment. Our unique aerial component gives our graduates experience working safely in the trees.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_\_\_

With:\_\_\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

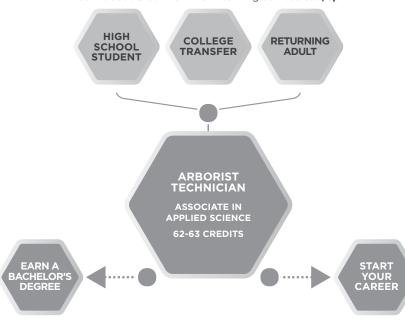
500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Agribusiness Agronomy Technician
- Agribusiness and Science Technology
- Farm Business & Production Management
- Farm Operation

# APPRENTICESHIP OPPORTUNITIES

· Arborist Apprenticeship

#### **CAREER OPTIONS**

- Arborist (commercial, utility, government)
- Golf Course Arborist
- Landscape Contractor
- Apprenticeship

#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit **mstc.edu/transfer**.

#### **PROGRAM OUTCOMES**

Employers will expect you, as an Arborist Technician graduate, to be able to:

- · Diagnose ornamental plant disorders.
- · Identify woody plants by common and scientific name.
- Apply tree biology for arboricultural maintenance practices.
- · Adhere to industry safety standards.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in Ornamental Plant Health Care, Dendrology and Silvics, and Arboriculture Operations 3.

#### TOOL AND EQUIPMENT KIT

While the College provides much of the equipment you'll be working with in the hands-on training, there are some items each student is personally responsible for.

Mid-State works with industry vendors to get discount prices on professional-grade tools. The equipment kit will cost approximately \$250-\$300. Students accepted into the program will get specific details about purchasing the equipment.

NOTES:		

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

#### **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

#### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### **Pre-Algebra**

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10001118 10001124 10001133 10001173 10801196 10801198 10806184	Landscape Plant Identification  Arborist Skills Introduction Chainsaw Safety and Operation Pruning for Structure  Oral/Interpersonal Communication  Speech  Plant Biology	2 2 2 2 3 3
Term 10001102 10001110 10001111 10001125 10001148 10804107 10804118 10809166	Plant Health Care Applicator  Tree Biology Intro to Horticulture Arboriculture Operations 1 People, Resources, and Sustainability College Mathematics  -or- Intermediate Algebra with Applications  Intro to Ethics: Theory & Application	edits 2 2 2 2 3 3 3
<b>Term</b> 10001105 10001126 10001127 10001199 10801136 10806134	Dendrology and Silvics Arboriculture Operations 2 Arboriculture Operations 3 Fish, Forest, and Wildlife Management English Composition 1  General Chemistry	2 2 3 3 4
Term 10001103 10001113 10001149 10001198 10809188 10809198	Applied Arboriculture & Urban Forestry Ornamental Plant Health Care Ecology for Arboriculture Soil & Water Resources Developmental Psychology & -or- Intro to Psychology &  Total credits 6:	2 3 3 3 3

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

#### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10001118 10001124 10001133 10001173	Reredits  Landscape Plant Identification 2 2  Arborist Skills Introduction 2  Chainsaw Safety and Operation 2  Pruning for Structure 2 2
<b>Term</b> 10001125 10001148 10801196 10801198	Arboriculture Operations 1 2 People, Resources, and Sustainability 3 Oral/Interpersonal Communication & -or- Speech & 3
<b>Term</b> 10806184 10804107	Plant Biology 3 College Mathematics 2 3 -or-
10804118	Intermediate Algebra with Applications 🗗 4
<b>Term</b> 10001102 10001110 10001111 10809166	Plant Health Care Applicator 2 2 Tree Biology 2 Intro to Horticulture 2 Intro to Ethics: Theory & Application 3
<b>Term</b> 10001126 10001127 10806134	Arboriculture Operations 2 2 Arboriculture Operations 3 2 General Chemistry 2 4
<b>Term</b> 10001113 10809188 10809198	Ornamental Plant Health Care 3 Developmental Psychology & -or- Intro to Psychology & 3
<b>Term</b> 10001105 10001199 10801136	Dendrology and Silvics 3 Fish, Forest, and Wildlife Management 3 English Composition 1 2 3
<b>Term</b> 10001103 10001149 10001198	8 credits Applied Arboriculture & Urban Forestry 2 Ecology for Arboriculture 3 Soil & Water Resources 3  Total credits 62-63
	iotal credits 62-65

#### **Applied Arboriculture & Urban Forestry** 10001103.....2 credits

Students gain familiarity with techniques & methods used in the management of trees & tree populations. This course also serves to create an awareness of arboriculture career paths.

Prerequisites: Pruning for Structure 100001173 and Tree Biology 100001110

# **Arboriculture Operations 1**

10001125 .....2 credits

Emphasizes practice of skills associated with being safe & productive members of crews engaged in basic tree work/ arboricultural operations. Topics include introductory elements of pruning & removal techniques, equipment operations, & work site set-up.

Prerequisites: Arborist Skills Introduction 10001124 and Pruning for Structure 10001173

#### **Arboriculture Operations 2**

10001126 ......2 credits

Builds upon the skills & topics of Arboriculture Operations 1. Students will participate as safe & productive members of crews engaged in an intermediate level of arboricultural operations skills development.

Prerequisites: Arboriculture Operations 1 10001125, Chainsaw Safety & Operation 10001133

# **Arboriculture Operations 3**

10001127 ......2 credits

Builds upon the skills & topics of Arboriculture Operations 2. Students will participate as safe & productive members of crews engaged in an advanced level of arboricultural operations skills development.

Prerequisite: Arboriculture Operations 2 10001126

# **Arborist Skills Introduction**

10001124 ......2 credits

Introduction to the basic techniques, safety requirements, & equipment employed by arborists engaged in tree care operations. Topics include aerial tree work methods, industry safety standards, equipment operations, rope usage, risk recognition, & introductory tree biology.

# **Chainsaw Safety and Operation**

10001133 .....2 credits

This course will familiarize students with common chainsaw practices employed within the arboricultural industry. including safe operation, routine maintenance, common cutting techniques, and use of personal protective equipment. Students will operate and maintain chainsaws. Additionally, field exercises will simulate tree removal operations.

#### College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Dendrology and Silvics**

10001105.....3 credits

Provides the student with an understanding of how trees interact with their environment and with one another, at different spatial and temporal scales. Builds on concepts from botany and ecology with an emphasis on woody plant systematics and silvics. Tree identification is a major component of this course.

Prerequisite: Landscape Plant Identification 10001118

#### Developmental Psychology & 10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological. cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Ecology for Arboriculture**

10001149.....3 credits

Introduces the basic principles of ecology and their application to management of natural resources. The scientific method and interactions between and among species are examined. Lab exercises are designed to give hands-on experience with measurement and data collection, preparation of technical reports, use of library resources, use of computer models, and development of critical thinking skills.

Prerequisite: Plant Biology 10806184

#### English Composition 1 2

#### 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Fish. Forest, and Wildlife Management 10001199.....3 credits

Provides an integrated introduction to principles and practices of fisheries, forestry, and wildlife management, including production of goods and services while maintaining ecosystem integrity and functions. Emphasizes contemporary issues.

### General Chemistry &

#### 10806134 ...... 4 credits

Covers the fundamentals of chemistry. Topics include the metric system; problem solving; periodic relationships; chemical reactions, chemical equilibrium; properties of water; acids, bases, and salts; and gas laws. High School GPA of 3.0 or Accuplacer QAS of 246 or ACT of 19, or College Mathematics 10804107 with a "C" or better, or Intermediate Algebra with Applications 10804118 with a "C" or better. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Intermediate Algebra with Applications & 10804118 ..... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Intro to Ethics: Theory & Application & 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decisionmaking process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Intro to Horticulture

#### 10001111.....2 credits

Provides an overview of the science and profession of horticulture. Its role and importance throughout history, current trends, and careers are covered. Particular attention is given to horticultural crops, plant growth, and plant development.

# Intro to Psychology 2

10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Landscape Plant Identification 2

10001118.....2 credits

Introduces students to woody trees/shrubs and herbaceous plants commonly used in residential and commercial landscapes in Wisconsin. The three plant groups covered in this course are woody trees/shrubs, herbaceous perennial plants, and herbaceous annual plants. Identification, installation, and maintenance are covered for each plant aroup.

#### Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236. Writing of 237, or ACT of 15 Reading/16 Writing, Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Ornamental Plant Health Care**

10001113.....3 credits

Classification and identification of important ornamental plant insects, diseases, and abiotic agents is presented, emphasizing their modes of plant damage. Diagnostics, damage assessment, sample preparation, and control strategies are introduced.

Prerequisites: Landscape Plant Identification 10001118 and Plant Health Care Applicator 10001102

#### People, Resources, and Sustainability 10001148.....3 credits

Explores the relationship between the human population and natural resources over time, and the effect this relationship has on the biosphere. Global resources, environmental concerns, and the human dimensions of resource management are explored from biological and socioeconomic perspectives.

#### **Plant Biology**

10806184 .....3 credits

This lecture/laboratory course provides students with an indepth study of the plant kingdom. The content includes, but is not limited to, plant cell anatomy and physiology, plant genetics, plant classification, plant anatomy and physiology, plant responses, plant life cycles, and ecology. A survey of viruses, prokaryotes, protista, and fungi as they pertain to plants is presented.

# Plant Health Care Applicator ©

10001102.....2 credits

Focuses on training to successfully pass the Wisconsin Department of Agriculture and Consumer Protection's pesticide applicator exam (which will be proctored in this class). Additionally, students are familiarized with chemical handling, mixing, calibration, and application via field exercises.

### Pruning for Structure &

10001173 .....2 credits

Focuses on the art and science of tree pruning. Topics include tree structure, introductory biology, pruning cuts, and young tree training. Students will gain hands-on experience performing tree pruning.

#### Soil & Water Resources

10001198.....3 credits

Introduces the student to integrated concepts of soil and water resources at the landscape level. Examines physical, chemical, and biological interactions relating to watershed processes and response to land use and management. *Prerequisite: Plant Biology 10806184; Corequisite: General Chemistry 10806134* 

#### Speech 🗹

10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

# Tree Biology

10001110 .....2 credits

This course provides an overview of the major structures and functions of woody plants. The overall objective is to provide a basic understanding of these complex organisms, equipping you with a solid foundation to diagnose myriad health & structural abnormalities you'll encounter. Major course themes include plant functions, physiology, adaptations, root systems, planting, & basic risk assessment.



# AUTOMATION & INSTRUMENTATION TECHNOLOGY

Associate in Applied Science (AAS) Program Code: 10-605-4

**Total Credits: 60** 

Unique in the Wisconsin Technical College System, the Automation & Instrumentation Technology program at Mid-State prepares graduates to measure and control industrial processes in today's high-tech manufacturing environments. In this program you'll apply mathematical skill and basic laws of physical sciences to design, install, calibrate, maintain, troubleshoot, and repair industrial control systems. You'll learn to use a variety of different forms of instrumentation and have access to state-of-the-art equipment. Field trips to businesses that have process control systems as an integral part of operations extend your hands-on experience into the real world.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where:

When:\_\_\_\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS

1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS

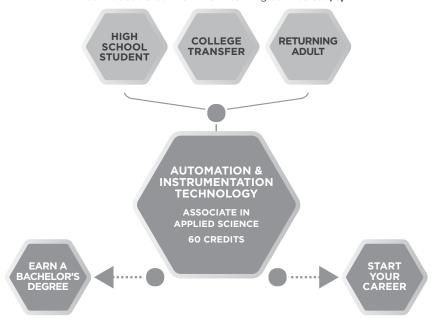
500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

• Civil Engineering Technology-Highway Technician

# APPRENTICESHIP OPPORTUNITIES

• Electrical & Instrumentation Technician Apprenticeship

#### **CAREER OPTIONS**

- Automation/Controls Engineering Technician
- Electrical and Instrumentation Technician
- Instrument Technician
- Apprenticeship

#### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as an Automation & Instrumentation Technology graduate, to be able to:

- Apply safety standards.
- · Utilize troubleshooting strategies.
- · Optimize instrumentation systems.
- · Optimize hardware and output devices.
- · Demonstrate programming in ladder logic.
- · Demonstrate networking principles.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

NOTES:		

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

#### **GPS for Student Success**

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes.

This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

#### Intro to College Writing

organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

Term 10605105 10605112 10605131 10605169 10801136 10804118	Electrical Circuits I Process Documentation  Process Equipment Instrumentation Principles  English Composition 1  Intermediate Algebra with Applications	3 1 2 3 3 4
Term 10150110 10462107 10605110 10605117 10623106 10804196	Networking I Industrial Safety  Electrical Circuits II Automation 1 - Beginning PLC  Intro to AutoCAD Trigonometry with Applications	·
Term 10462133 10605100 10605118 10605121 10804195 10809188 10809198	Electric Controls for Industrial Automation Process Measurements Instrumentation Automation 2 - Advanced PLC & Process Control Strategies College Algebra with Applications & Developmental Psychology & -or- Intro to Psychology &	
Term 10462131 10605119 10605133 10605172 10801196 10801198 10809122 10809166	Industrial Electric Power Applications Automation 3 - HMI's & Robotics  Process Troubleshooting Strategies Process Systems Oral/Interpersonal Communication  Process Communication  Process Systems Oral/Interpersonal Communication  Process Systems  Process Process  Process Systems  Process Systems	edits 2 2 1 2 3 3
	Total credits	s 60

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

# SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10605105 10605169 10804118	Electrical Circuits I 3 Instrumentation Principles  3 Intermediate Algebra with Applications 4
<b>Term</b> 10462107 10605110 10804196	Industrial Safety 2 2 Electrical Circuits II 3 Trigonometry with Applications 3
<b>Term</b> 10605112 10605131 10801136	Process Documentation 2 1 Process Equipment 2 English Composition 1 2 3
<b>Term</b> 10605117 10623106 10150110	Automation 1 - Beginning PLC 2 3 Intro to AutoCAD 1 Networking I 3
<b>Term</b> 10605118 10605121 10804195	Automation 2 - Advanced PLC 2 3 Process Control Strategies 2 College Algebra with Applications 2 3
<b>Term</b> 10462131 10605119 10801196 10801198	Industrial Electric Power Applications 2 Automation 3 - HMI's & Robotics 2 Oral/Interpersonal Communication 2 - or- Speech 3
<b>Term</b> 10462133 10605100 10809188 10809198	Becredits  Electric Controls for Industrial Automation 3  Process Measurements Instrumentation 2  Developmental Psychology  -or- Intro to Psychology  3  3
<b>Term</b> 10605133 10605172 10809122 10809166	Process Troubleshooting Strategies 1 Process Systems 2 Intro to American Government & -or- Intro to Ethics: Theory & Application & 3
	Total credits 60

# Automation 1 - Beginning PLC 🗹

10605117 .....3 credits

An overview of programmable logic controllers (PLCs) that provides a foundation of knowledge of the programming techniques, operation, and maintenance of PLCs used in typical industrial automation.

# Automation 2 - Advanced PLC & 10605118 ......3 credits

A lab intensive course covering advanced PLC topics and programming techniques, analog I/O, VFDs, basic HMI interfaces, industrial robotics and troubleshooting. Prerequisite: Automation 1 - Beginning PLC 10605117 or consent of instructor

# Automation 3 - HMI's & Robotics & 10605119 ......2 credits

A lab intensive course covering advanced PLC programming techniques, HMI programming, industrial robotic systems interface, networking basics and troubleshooting of automation systems.

Prerequisite: Automation 1 - Beginning PLC 10605117

# College Algebra with Applications & 10804195 ......3 credits

Covers the skills needed for success in calculus and many application areas on a baccalaureate level. Topics include the real and complex number systems, polynomials, exponents, radicals, solving equations and inequalities (linear and nonlinear), relations and functions, systems of equations and inequalities (linear and nonlinear), matrices, graphing, conic sections, sequences and series, combinatories, and the binomial theorem.

Prerequisite: Trigonometry with Applications 10804196 with a grade of "C" or better or Intermediate Algebra with Applications 10804118 with a grade of "C" or better. Students without Trigonometry with Applications are encouraged to bring transcripts for individual course evaluation.

# Developmental Psychology 2 10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Electric Controls for Industrial Automation 10462133......3 credits

Introduces the fundamentals of industrial motor controls, relay logic, ladder diagrams, industrial automation, and integrated manufacturing systems. The purpose of the course is to familiarize students with the terminology, capabilities, applications, and limitations of automated industrial controls through classroom and lab activities. *Prerequisite: Electrical Circuits 1 10605105* 

#### **Electrical Circuits I**

10605105 ......3 credits

The study of Ohm's Law and its application to D.C. circuits. Major topics include: Ohm's Law, series circuits, parallel circuits, combination circuits, Kirchhoff's Laws, and power relationships.

Corequisite: Intermediate Algebra with Applications 10804118

# Electrical Circuits II

10605110 ......3 credits

Continues the study of AC/DC circuits started in Electrical Circuits I. Introduces advanced DC circuit analysis techniques such as Thevenin's Theorem and nodal analysis. Includes discussion of voltage and power theorems used in the analysis of AC circuits consisting of both resistance and reactance. The complex plane and construction of phasor diagrams are also discussed. Concludes with an introduction to electronic filter circuits used in transmission and communication equipment. Approximately50 percent of the course is spent in the laboratory, applying the principles and theory presented in the classroom.

Prerequisite: Electrical Circuits I 10605105 with a "C" or better; Corequisite: Trigonometry with Applications 1080419

### English Composition 1 2

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

# Industrial Electric Power Applications 10462131 .....2 credits

Introduces concepts and applications of typical 3-phase power systems used in industry with focus on selection of overload devices, fuse sizing, wire selection, electrical motor theory and applications, and introduction to variable frequency drives through lecture and lab activities.

### Industrial Safety 🗷

10462107 ......2 credits

Provides an overview of safety, health, and environmental issues as they relate to industry. Various types of hazards and the controls and equipment used to reduce risks from hazards are discussed. Focuses on understanding the Occupational Safety and Health Administration (OSHA) and its function as well as other regulatory and enforcement agencies associated with industrial safety, health, and the environment.

# Instrumentation Principles 10605169 ......3 credits

This course emphasizes a functional and mathematical approach to pneumatic and electric instrumentation used in industry. Includes survey of pressure, level, flow, and temperature instruments and their mechanisms, and an introduction to process control fundamentals. The course covers fundamental principles in math and science that applies to process instrumentation and process control. Topics covered include unit conversions, spreadsheets and graphing, linear equations, calibration principles, statistical process analysis, simple machines, basic thermodynamics, and electric motor theory.

Corequisite: Intermediate Algebra with Applications 10804118

# Intermediate Algebra with Applications © 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to American Government 🗹 10809122.....3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to AutoCAD

10623106 ......1 credit

Learners will develop practical approaches to constructing basic 2D drawings in AutoCAD software by drawing, modifying, and assigning appropriate layer properties. Learners will also analyze length and area of shapes drawn in AutoCAD, summarize details through dimensions and annotations added to the drawings, and format the drawings for printing. Prior experience with computers is recommended.

# Intro to Ethics: Theory & Application © 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Psychology 2 10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Networking I 10150110......3 credits

Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, participants will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course is the first of three courses that align with CCNA certification. Covers the objectives of the first CCNA exam.

# Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Process Control Strategies 10605121 ......2 credits

This course examines various methods and techniques used in process control, including control loop analysis, control tuning (PID) process and tuning methods, system gain, statistical control processes, cascade and feed forward control, split control, and other advanced control techniques.

Prerequisite: Introduction to Instrumentation 10605111

### Process Documentation ©

10605112 .....1 credit

This course will provide the student with the tools needed to read and understand process drawings and diagrams used in the process industries to maintain and troubleshoot industrial processes. Specific documentation includes piping and instrument diagrams (P&ID), process flow diagrams (PFD), block flow diagrams, control loop diagrams, functional diagrams, electrical diagrams, utility flow diagrams, wiring diagrams, schematics, isometric drawings.

#### **Process Equipment**

10605131 .....2 credits

This course will provide students with detailed analysis of standard process equipment. Equipment discussed includes pumps, valves, piping, equipment connections, motors, tanks and vessels, basic wiring practices, compressors, regulators, boilers, containment, heat exchangers.

# Process Measurements Instrumentation 10605100......2 credits

Reviews basic principles and calibration standards and practices developed in instrument mechanics. Studies common sensing devices and components employed for the measurement of pressure, temperature, flow, level, and related phenomena.

Prerequisite: Introduction to Instrumentation 10605111

#### **Process Systems**

10605172......2 credits

This course will provide students with detailed analysis of standard process systems and how they are monitored and controlled. Systems examined include water/steam services (boilers and cooling towers), thermal transfer systems and heat exchangers, compressors and vacuum systems, HVAC, turbines, distillation and strippers, refrigeration, separators. *Prerequisite: Process Equipment 10605131* 

# Process Troubleshooting Strategies 10605133.....1 credit

This course develops employee skills related to troubleshooting and employment strategies in area manufacturing industries by working directly with companies that have agreed to partner with Mid-State for this course. The course requires the student to work with a partnering company to assist in a problem solving or project work situation. Local companies are asked to submit a current problem or project with a narrow focus relating to industrial automation or instrumentation. The student meets with company personnel as needed, formulates the problem or project, and researches methods of solving or completing the project.

Prerequisite: Process Control Strategies 10605121

#### Speech 🗷

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Trigonometry with Applications 10804196 ......3 credits

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles, complex numbers, DeMoivre's Theorem, polar coordinates, and vectors. Prerequisite: Intermediate Algebra with Applications 10804118 with a grade of "C" or better. Students without Intermediate Algebra with Applications are encouraged to bring transcripts for individual course evaluation.



# **AUTOMOTIVE** MAINTENANCE TECHNICIAN

**Technical Diploma** 

Program Code: 31-404-3

**Total Credits: 27** 

Mid-State's Automotive Maintenance Technician program prepares students for entry-level automotive repair work with special emphasis on mechanical relationships, basic engine performance, and suspension systems. You'll learn from industry experts to test and maintain basic automotive systems. You'll also apply the techniques you learn in the classroom to an automotive shop laboratory setting, with access to state-of-the-art hand and power tools and complex electrical diagnostic equipment. Graduates will have the confidence to start their careers in automotive repair facilities and retail service centers.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





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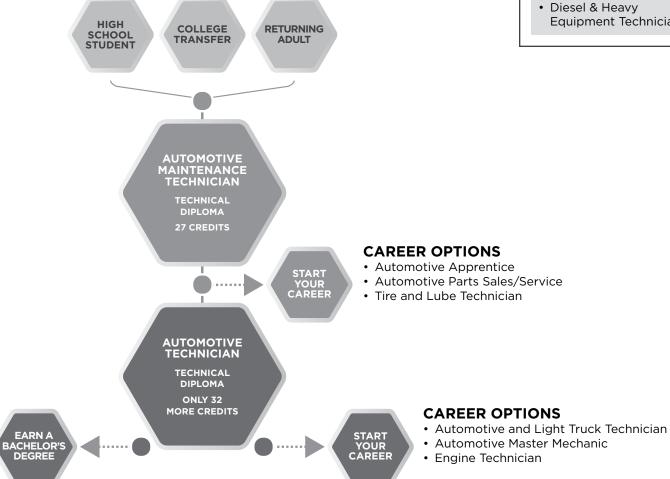
Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

#### **BEGIN AT ANY POINT** IN THE PATHWAY

**College Credit • Dual Credit** Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Diesel & Heavy Equipment Technician
- Diesel & Heavy Equipment Technician Assistant

#### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as an Automotive Maintenance Technician graduate, to be able to:

- Demonstrate professionalism appropriate to the auto service industry.
- Perform maintenance and light repair of automotive steering and suspension systems.
- Perform maintenance and light repair of automotive brake systems.
- Perform maintenance and light repair of automotive electrical and electronic systems.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Service Practices and Engine Repair courses.

#### PROTECTIVE CLOTHING

Students are required to purchase three "Mid-State Automotive Technician Student" uniform shirts. These shirts are available the first week of class for approximately \$30 each. Students are also required to wear safety glasses at all times in the lab. Acquisition of safety glasses is the responsibility of the student.

#### REQUIRED EQUIPMENT

Students need to purchase a Fluke 177 or Fluke 88V multimeter and test lead set before the start of the second term. These are available for purchase through the campus Bookstore for approximately \$270.

NOTES:			

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### GPS for Student Success 🗷

10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 .....2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### SAMPLE FULL-TIME CURRICULUM OPTION

32404308 32404330 32404340	Suspension & Steering Systems & Braking Systems-Automotive & Applied Fluid Power Intro to Electricity for the Automotive Industry & Service Practices in Automotive Industry &	5 5 2 1 1
<b>Term</b> 31442320 31442321 10457119 32404311	Welding Foundations 1 & Welding Foundations 2 & Fabrication Fundamentals 1 & Electrical Systems-Auto Engine Repair	1 1 1 5 5
	Total credits	27

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

### **SAMPLE PART-TIME CURRICULUM OPTION**

	32404375	7 credit Suspension & Steering Systems & Service Practices in Automotive Industry & Intro to Electricity for the Automotive Industry &	5 1
		<b>7 credit</b> Electrical Systems-Auto Applied Fluid Power	5 2
	31442321	<b>7 credit</b> Welding Foundations 1 <b>2</b> Welding Foundations 2 <b>2</b> Braking Systems-Automotive <b>2</b>	1 1 5
	<b>Term</b> 10457119 32404324	Fabrication Fundamentals 1 2 Engine Repair	1 5
١		Total credits 2	7

NOTES:			

### **Applied Fluid Power**

32404330 .....2 credits

Learners employ basic principles and application of pumps, compressors, motors, valves, seals, packing, and conductors to demonstrate the advantage of hydraulic and pneumatic systems as well as the physical properties of liquids and air. The intent is to identify various parts of a circuit and to illustrate standard liquid power components through laboratory experiments.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

# **Braking Systems-Automotive**

32404308.....5 credits

Learners employ fundamentals of vehicle braking systems including drum, disc, hydraulic and air systems to perform on-vehicle repairs. Includes instruction on power and anti-skid systems with emphasis on troubleshooting and component replacement and reconditioning.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

#### **Electrical Systems-Auto**

32404311.....5 credits

Learners employ principles of construction, function, and operation of starting motors, charging systems, and controls. Covers basic electronics, including capacitance, inductance, series and parallel circuits, magnetism and Ohm's Law, wiring schematics, soldering techniques, and use of diagnostic equipment. Vehicle control and accessory systems are studied.

Prerequisite: Intro to Electricity for the Automotive Industry 32404340

# **Engine Repair**

32404324 .....5 credits

Learners practice diagnosis, reconditioning and repair of cylinder heads, valve train components, and engine blocks and related components. Provides a general overview of engine types and operating characteristics. Covers engine support systems such as the lubrication systems, cooling system, ignition system, fuel and exhaust systems. Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043; Corequisite: Electrical Systems-Auto 32404311

# Fabrication Fundamentals 1 2

10457119......1 credit

An introduction to structural shapes and sheet metal fabrication. Presents fabrication techniques, metal selection, and layout, cutting, bending, drilling, threading, and joining using manual equipment and techniques. Information is presented to the student and followed up with lab activities to provide a hands-on experience. Emphasizes developing an understanding of the tools, techniques, safe work habits, and application of sheet metal fabrication skills.

#### Intro to Electricity for the Automotive Industry & 32404340.....1 credit

Introduces learners to electrical measurement tools and techniques. Includes both hands-on experience and theory on topics including multimeter operation, Ohm's law, wiring diagram interpretation, and circuit testing. Content is focused on tools and procedures commonly used in automotive, and diesel/heavy equipment industries. Learners will have the opportunity to earn NC3 multimeter certification during this course.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

#### Service Practices in Automotive Industry & 32404375 .....1 credit

Introduces the learner to common tools, terminology, and service practices in the transportation field. Covers safety, environmental concerns, and basic customer relations. Service shop management practices and the use of automated work order, parts ordering, and time management concepts are included.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

# Suspension & Steering Systems &

32404307 ......5 credits

Analyze construction and working principles of chassis components. Includes frames, suspension systems, steering gears and linkages, wheels and tires, and wheel alignment. Learners practice on-vehicle diagnosis and repair of suspension and steering systems.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

#### Welding Foundations 1 2 31442320 ......1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of FCAW, GMAW, and OXY-Fuel cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

# Welding Foundations 2 2

31442321.....1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of GTAW, SMAW and Plasma cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.



# **AUTOMOTIVE TECHNICIAN**

**Technical Diploma** 

Program Code: 32-404-2

**Total Credits: 59** 

Mid-State's Automotive Technician program gives students the experience and skills they need to diagnose and repair today's vehicles. The program emphasizes engine and transmission repair, the drive train and axles, suspension and steering systems, brakes, electrical systems, heating and air conditioning, and engine performance. You'll receive instruction from industry experts and have access to state-of-the-art equipment, including a variety of hand and power tools and complex electrical diagnostic equipment. Hands-on learning and opportunities to diagnose and repair cars for real customers will have you ready to enter the workforce with confidence.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

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- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





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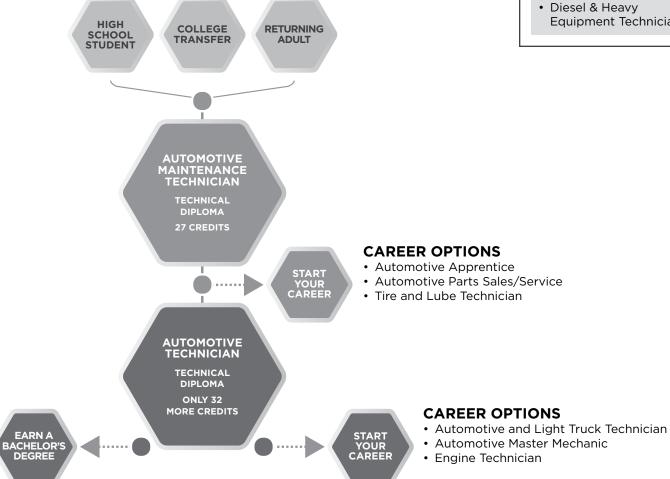
Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

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#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Diesel & Heavy Equipment Technician
- Diesel & Heavy Equipment Technician Assistant

#### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as an Automotive Technician graduate, to be able to:

- Demonstrate professionalism appropriate for the auto service industry.
- Perform diagnosis, service, and repair of automotive internal combustion engines.
- Perform diagnosis, service, and repair of automotive automatic transmission/transaxle systems.
- Perform diagnosis, service, and repair of automotive manual drive train and axle systems.
- Perform diagnosis, service, and repair of automotive steering and suspension systems.
- Perform diagnosis, service, and repair of automotive brake systems.
- Perform diagnosis, service, and repair of automotive electrical and electronic systems.
- Perform diagnosis, service, and repair of automotive heating and air conditioning systems.
- Perform diagnosis, service, and repair of automotive engine performance systems.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Service Practices and Fuel Control Systems courses..

#### PROTECTIVE CLOTHING

Students are required to purchase three "Mid-State Automotive Technician Student" uniform shirts. These shirts are available the first week of class for approximately \$30 each. Students are also required to wear safety glasses at all times in the lab. Acquisition of safety glasses is the responsibility of the student.

#### **REQUIRED EQUIPMENT**

Students need to purchase a Fluke 177 or Fluke 88V multimeter and test lead set before the start of the second term. These are available for purchase through the campus Bookstore for approximately \$270.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success ☑ 10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

#### Intro to College Writing

this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### SAMPLE FULL-TIME CURRICULUM OPTION

32404307 32404308 32404375	Applied Mathematics  Suspension & Steering Systems  Braking Systems-Automotive  Service Practices in Automotive Inc Intro to Electricity for the Automotive Industry	14 credits 2 5 5 dustry 2 1
	Welding Foundations 1 2 Welding Foundations 2 2 Fabrication Fundamentals 1 2 Electrical Systems-Auto Engine Repair Applied Fluid Power	15 credits
<b>Term</b> 32404313 31801368 32404323 32404325 32806351	Electric Control Systems Workplace Communication Automatic Transmissions Manual Transmissions Applied Science	15 credits
<b>Term</b> 32404312 32404320 32404322 32404326 32404377	Advanced Electrical Systems-Auto Hybrid Systems-Auto Heating/Air Conditioning Fuel Control System-Auto Business Practices in the Transportation Industry	15 credits 5 1 3 5 1 1 credits 59

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

#### SAMPLE PART-TIME CURRICULUM OPTION

	Suspension & Steering Systems & Intro to Electricity for the Automotive Industry & Service Practices in Automotive Industry	7 credits 5 1 dustry 2 1
<b>Term</b> 32404311 32404330	Electrical Systems-Auto Applied Fluid Power	<b>7 credits</b> 5 2
<b>Term</b> 32404308 31442320 31442321	Braking Systems-Automotive & Welding Foundations 1 & Welding Foundations 2 &	7 credits 5 1
<b>Term</b> 10457119 32404324	Fabrication Fundamentals 1 🕏 Engine Repair	<b>6 credits</b> 1 5
<b>Term</b> 31804305 32404323 32806351	Applied Mathematics & Automatic Transmissions Applied Science	9 credits 2 5 2
<b>Term</b> 32404312 32404322	Advanced Electrical Systems-Auto Heating/Air Conditioning	<b>8 credits</b> 5 3
<b>Term</b> 32404313 31801368 32404325	Electric Control Systems Workplace Communication Manual Transmissions	8 credits 2 1 5
<b>Term</b> 32404320 32404326 32404377	Hybrid Systems-Auto Fuel Control System-Auto Business Practices in the Transportation Industry	7 credits 1 5
	Total	credits 59

# **COURSE DESCRIPTIONS**

# Advanced Electrical Systems-Auto 32404312......5 credits

Learners employ theory and operational fundamentals to diagnose and repair vehicle electronic/electrical systems, including computer self-diagnosis, scanners, analyzers, sensors, actuators, and computerized ignitions. Also covers diagnostic and repair procedures on major electrical-electronic emission control systems.

Corequisite: Electrical Systems-Auto 32404311

# Applied Fluid Power 32404330 ......2 credits

Learners employ basic principles and application of pumps, compressors, motors, valves, seals, packing, and conductors to demonstrate the advantage of hydraulic and pneumatic systems as well as the physical properties of liquids and air. The intent is to identify various parts of a circuit and to illustrate standard liquid power components through laboratory experiments.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

#### Applied Mathematics &

31804305.....2 credits

Students taking Applied Math I make and convert various measurements. Students use formulas to solve problems. They compute dimensions of geometric shapes. Students use statistical tools to represent and analyze data. They analyze various financial situations. Students use basic right triangle trigonometry to solve problems. In each topic area. students solve application problems.

#### **Applied Science**

32806351 .....2 credits

This survey course in basic physics is designed for students in the Automotive Technician, Diesel & Heavy Equipment Technician, and Precision Machining Technician programs. Topics have been specially selected to provide students with basic support material for principles applied in the above listed programs. Topics to be covered include basic measurement skills; problem solving; motion; forces and energy transfer in linear and rotary systems; properties of solids, liquids and gases; temperature and heat; and basic DC electricity.

### **Automatic Transmissions**

32404323 ......5 credits

Learners practice automatic transmission diagnosis and repair. Topics include gear systems, hydraulic and electronic control systems, transmission servicing, in vehicle repair, and out of vehicle transmission overhaul.

Prerequisites: Electrical Systems-Auto 32404311 and Applied Fluid Power 32404330

#### **Braking Systems-Automotive** 32404308......5 credits

Learners employ fundamentals of vehicle braking systems including drum, disc, hydraulic and air systems to perform on-vehicle repairs. Includes instruction on power and anti-skid systems with emphasis on troubleshooting and component replacement and reconditioning. Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

#### **Business Practices in the Transportation Industry** 32404377 ......1 credit

Provides learners with hands on experience completing repair orders, customer service and parts management. Students will learn from instructors, local shop owners and professionals in the industry. Topics covered will include shop management, insurance and worker's compensation considerations, warranties, and pricing systems. Corequisite: Fuel Control System-Auto 32404326

# **Electrical Systems-Auto**

32404311.....5 credits

Learners employ principles of construction, function, and operation of starting motors, charging systems, and controls. Covers basic electronics, including capacitance, inductance, series and parallel circuits, magnetism and Ohm's Law, wiring schematics, soldering techniques, and use of diagnostic equipment. Vehicle control and accessory systems are studied.

Prerequisite: Intro to Electricity for the Automotive Industry 32404340

#### **Electric Control Systems**

32404313 .....2 credits

Introduces learners to fundamental electronic control programming logic, terminology, and design. Learners practice basic programming and digital control techniques complete control tasks that are analogous to control tasks found in modern automobiles.

Prerequisite: College Mathematics 10804107

### **Engine Repair**

32404324 .....5 credits

Learners practice diagnosis, reconditioning and repair of cylinder heads, valve train components, and engine blocks and related components. Provides a general overview of engine types and operating characteristics. Covers engine support systems such as the lubrication systems, cooling system, ignition system, fuel and exhaust systems. Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043; Corequisite: Electrical Systems-Auto 32404311

#### Fabrication Fundamentals 1 2

10457119......1 credit

An introduction to structural shapes and sheet metal fabrication. Presents fabrication techniques, metal selection, and layout, cutting, bending, drilling, threading, and joining using manual equipment and techniques. Information is presented to the student and followed up with lab activities to provide a hands-on experience. Emphasizes developing an understanding of the tools, techniques, safe work habits. and application of sheet metal fabrication skills.

#### **Fuel Control System-Auto** 32404326 ......5 credits

Learners identify and diagnose vehicle ignition systems, fuel systems, air induction systems, emission control systems, and engine electrical systems. Focuses on fault diagnosis, component testing, and repairs for domestic as well as import vehicles. Includes a review of engine operation and related servicing.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

# **Heating/Air Conditioning**

32404322 .....3 credits

Provides an introduction to vehicle air conditioning systems. System components, operating characteristics, component testing, diagnosis, and repair are covered in detail for popular system types. Includes servicing of engine cooling systems as well as diagnosis and servicing of vehicle heating systems. Prerequisite: Admission to Automotive Technician program 324042 or Diesel & Heavy Equipment Technician program 324121

# **Hybrid Systems-Auto**

32404320 .....1 credit

Learners receive a general overview of hybrid vehicle systems, including motor, inverter, and CVT operation. Also provides an overview of hybrid safety requirements and demonstration of proper high voltage lockout procedures. Prerequisite: Automatic Transmissions 32404323; Corequisites: Advanced Electrical Systems-Auto 32404312 and Fuel Control Systems-Auto 32404326

# Intro to Electricity for the Automotive Industry 2 32404340.....1 credit

Introduces learners to electrical measurement tools and techniques. Includes both hands-on experience and theory on topics including multimeter operation, Ohm's law, wiring diagram interpretation, and circuit testing. Content is focused on tools and procedures commonly used in automotive, and diesel/heavy equipment industries. Learners will have the opportunity to earn NC3 multimeter certification during this course.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

#### **Manual Transmissions**

32404325 .....5 credits

Learners practice manual drivetrain fault diagnosis and repair. Topics includes clutch, drive shaft, and universal joint diagnosis and servicing. Additional topics include rear axle servicing and four-wheel drive diagnosis and repair. *Corequisite: Automatic Transmissions 32404323* 

# Service Practices in Automotive Industry & 32404375 .....1 credit

Introduces the learner to common tools, terminology, and service practices in the transportation field. Covers safety, environmental concerns, and basic customer relations. Service shop management practices and the use of automated work order, parts ordering, and time management concepts are included..

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

#### 

Analyze construction and working principles of chassis components. Includes frames, suspension systems, steering gears and linkages, wheels and tires, and wheel alignment. Learners practice on-vehicle diagnosis and repair of suspension and steering systems.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043

# Welding Foundations 1 2

31442320 .....1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of FCAW, GMAW, and OXY-Fuel cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

# Welding Foundations 2 ☑ 31442321.....1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of GTAW, SMAW and Plasma cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

### Workplace Communication

31801368.....1 credit

Analyze workplace communication situations to develop professional verbal and written communication skills. Learners apply verbal and written communication skills, as well as conflict resolution strategies, to improve workplace communication climates and promote personal and professional growth.



# BARBER TECHNOLOGIST

**Technical Diploma** 

Program Code: 30-502-5

**Total Credits: 25** 

The Barber Technologist program at Mid-State is a part-time program that gives students hands-on training in the techniques they need to thrive in barbering. Through a combination of online and face-to-face classes, as well as hours in Mid-State's on-campus salon, you'll learn both traditional and modern cutting and styling, safe use of common barber shop chemicals, and professional shaving techniques.

Mid-State's Barber Technologist program prepares students to obtain the required licensure to be employed/practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examination, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

#### **CHECKLIST:**

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where:

....

With:

When:\_\_\_

- □ Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- □ Other:\_\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449



STEVENS POINT CAMPUS
1001 Centerpoint Drive

WISCONSIN RAPIDS CAMPUS
500 32nd Street North

500 32nd Street North Wisconsin Rapids, WI 54494

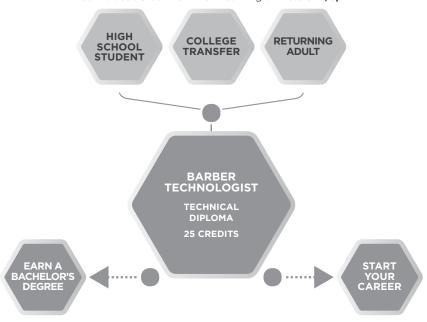
Stevens Point, WI 54481

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Cosmetology
- · Nail Technician

#### **CAREER OPTIONS**

- Barber
- Barber Sales (Retail/Wholesale)
- Barbershop Owner

#### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Barber Technologist graduate, to be able to:

- Apply safety and infection control procedures.
- Identify hair and scalp disorders.
- · Perform haircutting services.
- Demonstrate shaving and other facial hair removal techniques.
- Perform male facial procedures.
- · Perform texture services.
- · Perform hair color services.
- Demonstrate hairstyling and finishing techniques.
- Adhere to the current Wisconsin administrative codes and statutes for barbers.
- Demonstrate interpersonal skills for success.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will take a mock board exam to fulfill the TSA requirement.

Program begins every January and runs through December.

This program meets the Wisconsin state barbering requirement of 1,000 hours of training and is regulated by the Wisconsin Department of Safety and Professional Services. Federal regulations require programs for licensure to use clock hours in all areas of administering Title IV federal financial aid. Financial aid and scholarships are available to those who qualify.

Students must purchase a kit comprised of required tools and supplies. The cost of the kit is approximately \$1,100.

#### **TECHNICAL STANDARDS**

Students must have good fine motor skills, especially finger dexterity, as well as good hand/eye coordination and 20/40 vision in best eye with 70 degrees to each side for peripheral vision, as determined by the Department of Transportation.

#### PROGRAM PROGRESSION

In order to progress in and successfully complete the program, students must repeat core courses (courses numbered 30-502-xxx) not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequistes.

Please note that the ability to repeat courses is dependent upon availability of courses. Students may be required to apply for program re-entry in order to repeat courses.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success & 10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### **SAMPLE PART-TIME CURRICULUM OPTION**

30502341 30502342 30502703	Haircutting Techniques for Barbers Facial Hair and Skin Care Techniques for Barbers Barbershop Operations Introduction to the Barber Profession Hairstyling for Barbers	2 credits 3 4 1 2 2
	Barbershop Service Skills Basic Barber Client Services	3 credits 1 2
30502346 30502704 30502705	Advanced Barber Client Services Barber Capstone Experience Haircoloring for Barbers Chemical Texturing for Barbers Master Barber Client Services	0 credits
	Total c	redits 25

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- The Barber Technologist program is a part-time hybrid program.
- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

NOTES:	

### **Advanced Barber Client Services**

30502345 ......2 credits

Students continue to refine barbering techniques with an emphasis on haircoloring and chemical texturing services. Students will apply knowledge and skills to provide all barber services on customers in the on-campus barbershop. Prerequisite: Admission to Barber Technologist Program 305025 Corequisites: Haircoloring for Barbers 30502704 and Chemical Texturing for Barbers 30502705

# **Barber Capstone Experience**

30502346 .....2 credits

Students prepare for the state board exam and for securing a job. Students complete a mock assessment of all state board practical and written concepts, including state law. Students also prepare for their job search and for working with the business side of the barbering industry. Prerequisite: Admission to Barber Technologist Program 305025: Coreguisite: Master Barber Client Services 30502734

#### **Barbershop Operations**

30502342 .....1 credit

Focuses on developing front desk and client relation skills including managing bookings and applying sanitation standards to dispensary practices. Emphasizes daily operations of a barbershop and the professional attitudes needed to be successful in the industry.

Prerequisite: Admission to Barber Technologist Program 305025: Corequisite: Introduction to the Barber Profession 30502703

#### **Barbershop Service Skills**

30502343 .....1 credit

Taking knowledge learned from the first semester courses, students practice consultations and draping, haircutting. hairstvling, shaving and facial massages in the on-campus barbershop.

Prerequisites: Admission to Barber Technologist Program 305025, Haircutting Techniques for Barbers 30502340, Facial Hair and Skin Care Techniques for Barbers 30502341. Hairstyling for Barbers 30502706

### **Basic Barber Client Services**

30502344.....2 credits

Students continue to enhance their barbering techniques by working on actual clients in the on-campus barbershop setting. Emphasis is placed on interacting with clients and performing services at a faster rate with more precision. Prerequisites: Admission to Barber Technologist Program 305025, Haircutting Techniques for Barbers 30502340, Facial Hair and Skin Care Techniques for Barbers 30502341, Hairstyling for Barbers 30502706

# **Chemical Texturing for Barbers**

30502705 ......2 credits

This course provides an overview of various wrap techniques, hair relaxing applications, reformation curls, and chemical blow-out services.

Prerequisite: Admission to Barber Technologist Program 305025

#### Facial Hair and Skin Care Techniques for Barbers 30502341...... 4 credits

Shaving and facial massages are two services central to the barbering profession. Students will learn about the techniques, tools, equipment, and products used in performing facial massages and facial hair services. Prerequisite: Admission to Barber Technologist Program 305025

# Haircoloring for Barbers

30502704.....2 credits

This course includes the theory and chemistry of color mixing as well as procedures including lightening, cap, foiling, and corrective color.

Prerequisite: Admission to Barber Technologist Program 305025

### Haircutting Techniques for Barbers

**30502340**...... 3 credits Introduces haircutting theory and terminology and provides

students with practice using the basic tools of the barbering profession. Students will learn how to perform a cut from consultation to finishing techniques.

Prerequisite: Admission to Barber Technologist Program 305025

### **Hairstyling for Barbers**

30502706.....2 credits

This course emphasizes wet and dry hairstyling and includes hair analysis, shampooing, conditioning, reconditioning, scalp and hair treatments, blow drying, fingerwaves, pincurls, roller setting, thermal styling, and hair replacement techniques.

Prerequisite: Admission to Barber Technologist Program 305025

#### **Introduction to the Barber Profession** 30502703 ......2 credits

Provides an overview of the barbering profession, safety and decontamination in the barbershop, properties and disorders of the skin and scalp, and related science theory. Prerequisite: Admission to Barber Technologist program 305025

#### **Master Barber Client Services**

30502734 ......2 credits

Students provide all barber services on customers in the client lab and prepare for the Wisconsin State Barber licensing exam. Emphasis is on providing services with speed and accuracy, including hair and scalp analysis, shampooing, haircutting, shaving, facial services, and chemical services.

Prerequisite: Admission to Barber Technologist program 305025; Coreguisites: Haircoloring for Barbers 30502704, Chemical Texturing for Barbers 30502705



# BUSINESS MANAGEMENT

Associate in Applied Science (AAS)
Program Code: 10-102-3
Total Credits: 63-64

Mid-State's Business Management program provides a broad business background that prepares individuals to work in middle management or run a business. Students develop general technical and interpersonal skills related to management, finance, operations, customer service management, ethics, and much more. Guest speakers, field trips, business tours, and professional organization presentations are combined with hands-on simulations, mock interviews, and projects for local businesses.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other: \_\_\_\_\_

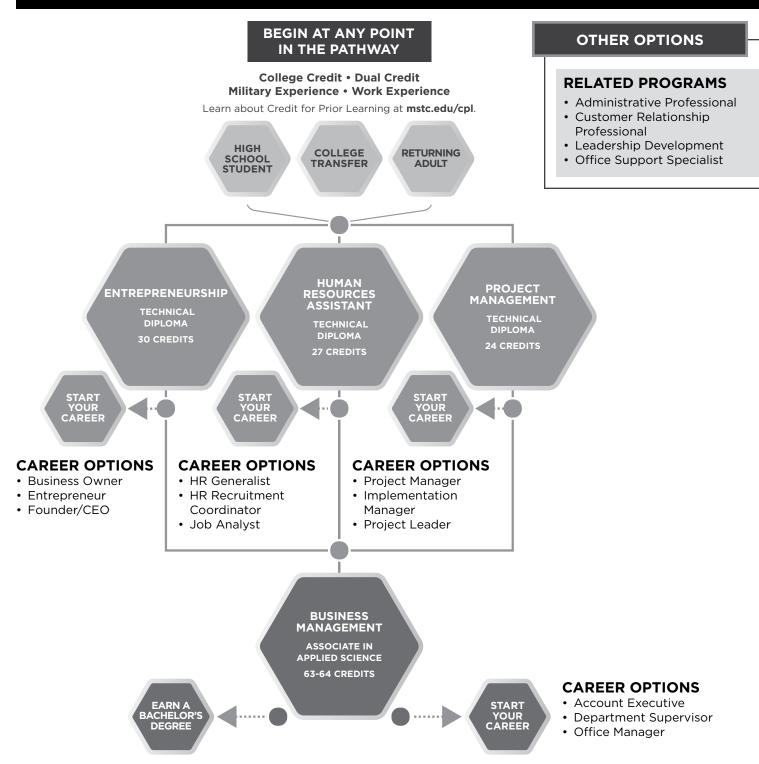
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mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North Wisconsin Rapids, WI 54494



#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Business Management graduate, to be able to:

- Plan the operations of a business across functional areas.
- Organize resources to achieve the goals of the organization.
- Direct individuals and/or processes to meet organizational goals.
- · Control business processes.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Business Management program outcomes are measured in the TSA-designated course Business Decision Making.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

#### **GPS for Student Success**

and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

#### Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10102101 10103106 10102138 10801136 10809122 10809172 10809196	Intro to Business & Microsoft Office-Introduction & Organizational Behavior & English Composition 1 & Intro to American Government & -or-Introduction to Diversity Studies & -or-Intro to Sociology &	dits 3 3 3 3 3
<b>Term</b> 10102110 10102131 10196191 10196193 10801196 10801198	Employment Law Entrepreneurial Management Supervision © Human Resource Management Oral/Interpersonal Communication © -or- Speech ©	3 3 3 3 3
<b>Term</b> 10102104 10102180 10104102 10196189 10809195 10804107	Business Law & International Business Marketing Principles & Team Building & Problem Solving Economics & College Mathematics & -or-Intermediate Algebra with Applications & -or-Internations & College Mathematics & International	dits 3 3 3 3 3 4
<b>Term</b> 10101140 10102121 10102160 10196188 10196192 10809188 10809198	Accounting 1 <b>Z</b> -or- Finance and Budgeting <b>Z</b> Business Decision Making Project Management Managing for Quality Developmental Psychology <b>Z</b> -or- Intro to Psychology <b>Z</b>	3 3 3 3 3
	10102101 10103106 10102138 10801136 10809122 10809172 10809196  Term 10102110 10102131 10196191 10196193 10801198  Term 10102104 10102180 10104102 10196189 10809195 10804107  10804118 10804189  Term 10101140 10102121 10102160 10196188 10196192 10809188	Intro to Business & Microsoft Office-Introduction & Organizational Behavior & Organizational Behavior & Intro to American Government & -or-Introduction & Organizational Behavior & Intro to American Government & -or-Introduction to Diversity Studies & -or-Introduction to Diversity Studies & -or-Intro to Sociology & Intro to

<sup>☑</sup> This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

### **SAMPLE PART-TIME CURRICULUM OPTION**

<b>Term</b> 10102101	Intro to Business 🗹	9 credits
10103106 10102138	Microsoft Office-Introduction & Organizational Behavior &	3
<b>Term</b> 10102110	Employment Law	9 credits
10196191 10801196 10801198	Supervision & Oral/Interpersonal Communication & Speech &	3 <b>? -or-</b> 3
<b>Term</b> 10104102	Marketing Principles 🕝	9 credits
10801136 10809122	English Composition 1 2 Intro to American Government 2 - or	3 ' <b>-</b>
10809172 10809196	Introduction to Diversity Studies 🗷 - Intro to Sociology 🗹	<b>or-</b> 3
Term		6 credits
10102131 10196193	Entrepreneurial Management Human Resource Management	3
Term		10 credits
10102104 10102180	Business Law 🕝 International Business	3 3 3
10804107	College Mathematics 🗹	3
10804118	Intermediate Algebra with Application	ons 🗹 4
10804189	Introductory Statistics &	3
Term	Duningh Managaran	9 credits
10196188 10196192	Project Management Managing for Quality	3
10809188 10809198	Developmental Psychology <b>&amp; -or-</b> Intro to Psychology <b>&amp;</b>	3
Term		6 credits
10196189 10809195	Team Building & Problem Solving Economics &	3
Term	A a a a unabim au 1 ma	6 credits
10101140 10102121 10102160	Accounting 1 <b>&amp; -or-</b> Finance and Budgeting <b>&amp;</b> Business Decision Making	3 3
	Total cred	lits 63-64

#### Accounting 1 🗹

#### 10101140.....3 credits

A beginning course designed especially for majors or those who need a strong foundation in accounting principles. Develops the accounting cycle of journaling, posting, adjusting, closing, and reporting. Also emphasizes service and merchandising sole proprietorships in developing the accounting cycle. Explores issues for accounting for cash, accounts and notes receivable, inventories, and fixed assets.

#### **Business Decision Making**

#### 10102160 ......3 credits

Develops skill to enable students to make individual decisions and participate in and facilitate group decisions in pursuit of the goals and objectives of an organization. Students analyze decision-making environments; employ a systematic decision-making process; use creative and analytic thinking tools for information gathering and analysis; employ ethical and social standards; contribute in group decision-making; and facilitate the group decision-making process.

Prerequisites: Nine core credits from a 102, 103, 109, 196, or 623 program code

#### Business Law &

#### 10102104.....3 credits

Introduces the basic foundation of laws and regulatory systems applicable to the business environment. Students examine the UCC, contract torts, agency law, and business and cybercrime. Students apply business legal theory in conjunction with ethical decision making through practical application.

#### College Mathematics &

#### 10804107 ......3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of C or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Developmental Psychology 2

#### 10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Economics &

#### 10809195 .....3 credits

Provides an overview of how a market-oriented economic

system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/ 16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### **Employment Law**

#### 10102110 ......3 credits

Introduces a broad scope of employment laws and provides the opportunity to apply these laws to the employment arena. Includes laws relating to anti-discrimination, including the Civil Rights Act, ADEA, and ADA; wage and hour regulation, including FLSA; employer-provided pensions, including ERISA; health insurance, including COBRA and ACA; and unemployment and worker's compensation insurance.

# English Composition 1 2

#### 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of C or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### **Entrepreneurial Management**

10102131 .....3 credits

Introduces students to the concept of entrepreneurship. Learners study entrepreneurial practices primarily by developing a business plan for a venture of their choice. This includes comparing ways of going into business as well as developing marketing, legal, financial, products/services, management, and operations plans for a small business of their choice. Entrepreneurial behavior within companies is examined.

Prerequisite: Nine core credits from a 102, 103, 109, 196, or 623 program code

#### Finance and Budgeting &

10102121 ......3 credits

For the nonfinancial manager, this course introduces the language of accounting, finance, and budgeting. Provides an overview of the use and analysis of financial statements. Business planning and the foundations and development of budgets are explored. Business financing basics and the securing of necessary financing for a business are covered. Practical application of financial statement creation and analysis, budgetary activities, and finance calculations are included.

#### **Human Resource Management** 10196193.....3 credits

Applies skills and tools necessary to perform human resource functions in an organization. Each learner demonstrates skill in following EEOC laws; writing job descriptions; recruiting, selecting, and orienting employees; developing policies and procedures; developing and conducting training; designing performance appraisal plans; developing employee development plans; and selecting compensation and benefit strategies.

Prerequisite: Nine core credits from a 102, 103, 109, 196, or 623 program code.

#### Intermediate Algebra with Applications & 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations: algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of C or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **International Business**

10102180 ......3 credits

Introduces topics concerning international business while illustrating its scope and importance. Topics include the impact of geography, trade protectionism, culture, legal structure, politics, and currency on business dealings. Students also research a particular country in depth.

# Intro to American Government &

10809122.....3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Intro to Business &

10102101.....3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

# Intro to Psychology 2

10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Sociology &

10809196 ......3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Introduction to Diversity Studies & 10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236. Writing of 237 or ACT of 15 Reading/16 Writing, Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Introductory Statistics &

10804189 .....3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of C or better or College Math 10804107 or equivalent.

# **Managing for Quality**

10196192.....3 credits

Apply skills and tools necessary to implement and maintain a continuous improvement environment. Each learner will demonstrate the application of a personal philosophy of quality, identify stakeholder relationships, identify ways to meet/exceed customer expectations, apply a systemsfocused approach, use quality models and tools, manage a quality improvement project, and measure effectiveness of continuous improvement activities.

# **Marketing Principles**

10104102 ......3 credits

This course serves as an introduction to the fundamental marketing concepts used to apply marketing strategies to product development, distribution, pricing, and promotion of goods and services.

#### Microsoft Office-Introduction & 10103106 ......3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts. Windows Explorer, and web usage. Students should possess basic keyboarding, mouse, and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

#### Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Organizational Behavior &

10102138.....3 credits

This course assists the learner in becoming a more effective co-worker, team member and organizational citizen through an understanding of the key principles of how people behave within organizations and in turn, predict and influence future behavior. As a result, the learner will analyze organizational structures, assess organizational culture, analyze leadership types and styles, apply conflict resolution strategies, explore power relationships, implement change management techniques, demonstrate effective team management and describe the ingredients of diversity as these aspects are related to people's behavior in organizations.

### **Project Management**

10196188.....3 credits

Applies skills and tools necessary to design, implement, and evaluate formal projects. Each learner will examine the role of project management, create a project charter, define project work scope, manage project risks, and develop a network diagram, project schedule, and project budget. Prerequisite: Nine core credits from a 102, 103, 109, 196, or 623 program code

#### Speech 2

10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a C or better or equivalent.

# Supervision 2

10196191.....3 credits

Applies skills and tools necessary to perform the functions of a contemporary frontline leader. Students engage in operational planning, analyze organizational structures, review the staffing process, employ techniques to enhance employee personal and group effectiveness, and develop control techniques to measure effectiveness in the above areas.

# **Team Building & Problem Solving**

10196189 ......3 credits

Applies skills and tools necessary to facilitate problem solving in a team environment. Each learner assumes the roles and responsibilities of team leadership in the stages of team development, uses a systematic problem-solving process, and employs consensus-building and conflictmanagement strategies.



# CENTRAL SERVICE TECHNICIAN

**Technical Diploma** 

Program Code: 30-534-1

**Total Credits: 17-20** 

Mid-State's hands-on Central Service Technician program prepares students to work with supplies and equipment related to surgery, obstetrics, emergency departments, and other patient care settings. Effective communication is vital within this multi-service area. The curriculum includes online instruction, lab, and clinical experience. The clinical portion of the course places students at a minimum of two sites. Students learn the principles of standard precautions, asepsis, disinfection, and sterilization procedures. Course completion leads to a technical diploma and eligibility for certification exams.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where:

When:\_\_\_ With:

Official Transcripts
 Mid-State Technical College
 Student Services Assistant
 1001 Centerpoint Drive
 Stevens Point, WI 54481

- Criminal Background Statement of Understanding and Release of Information Form
- Other:

mstc.edu 888.575.6782 TTY: 711





**ADAMS CAMPUS** 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS

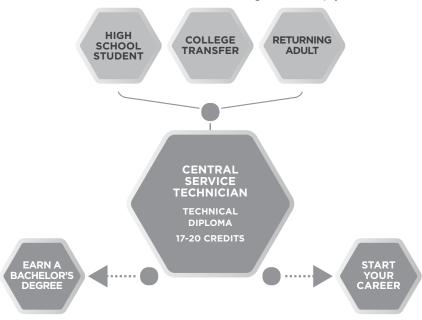
500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Health & Wellness Promotion
- Health Information Management
- Medical Assistant
- Medical Coder
- Nursing
- Nursing Assistant
- Pharmacy Services Management
- Pharmacy Technician
- Phlebotomy Technician
- Respiratory Therapy
- Surgical Technologist

#### **CAREER OPTIONS**

- · Central Services Technician
- Sterile Processing Technician
- Instrument Specialist

#### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### PROGRAM OUTCOMES

Employers will expect you, as a Central Service Technician graduate, to be able to:

- Apply principles of infection control in the role of the central service technician.
- Decontaminate instruments and equipment.
- Prepare instruments, equipment, and supplies.
- · Apply sterilization techniques.
- Perform inventory control and distribution.
- Function as an ethical, legal, and professional member of the health care team.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students who successfully complete the skills demonstrations in the clinical courses will meet the TSA requirements.

#### **ADDITIONAL ENTRY CRITERIA**

To apply to the Central Service Technician program, please submit the following document to Mid-State Admissions:

 Criminal Background Statement of Understanding and Release of Information form

Mid-State Technical College • Admissions 500 32nd Street North Wisconsin Rapids, WI 54494

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a central service technician is available at **mstc.edu/programs/central-service-technician**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

#### **CLINICAL-RELATED REQUIREMENTS**

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.

#### PROGRAM PROGRESSION AND COMPLETION

In order to maintain a passing status and progress in the program, students must:

- Repeat courses not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of "C" or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability in courses. Students may be required to apply for program re-entry in order to repeat courses within the program's instructional area.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

NOTES:			

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success &

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

#### Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### SAMPLE FULL-TIME CURRICULUM OPTION

Term	17-20 (	redit
10501101	Medical Terminology 🗹	3
10501107	Digital Literacy for Healthcare 🗹	2
10501109	Medical Law, Ethics, and Professionalism	2
30534301	Central Service	5
31509302	Human Body in Health and Disease	3
	-or-	
10806177	General Anatomy & Physiology 🗹	4
10806197	Microbiology 2	4
	-or-	
31806311	Applied Microbiology	2
	Total credits	17-20

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

#### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10501101 10501107 31509302	8-9 cm Medical Terminology  Digital Literacy for Healthcare  Human Body in Health and Disease -or-	3 2 3
10806177	General Anatomy & Physiology 🗹	4
<b>Term</b> 10501109 30534301 10806197	9-11 c Medical Law, Ethics, and Professionalism Central Service Microbiology & -or-	<b>redit</b> 2 5 4
31806311	Applied Microbiology	2
	Total credits 1	7-20

#### **Applied Microbiology**

#### 31806311.....2 credits

Directs the learner's understanding of aseptic techniques, antimicrobial methods, specimen collection, preparation of cultures, body defenses against microorganisms, the infectious process, and the transmission of disease-causing organisms. Students learn such techniques as standard and transmission-based precautions, sanitization, disinfection, sterilization, preparation of cultures, and microscopic slide preparations with simple staining and gram staining.

#### **Central Service**

#### 30534301...... 5 credits

Students are prepared with the knowledge and skills necessary to function as a central service technician. Central service is the hub of all activities involving supplies and equipment for surgery, obstetrics, emergency departments, and other patient care areas. Students learn the principles of standard precautions, asepsis, disinfection, and sterilization procedures. Effective communication is vital within this multi-service area. Central service is located in all health care facilities such as nursing homes, clinics, and hospitals. Patient interaction is minimal within this area of specialty. Online instruction, lab, and clinical experience are part of the curriculum. Upon graduation, students are eligible for certification exams. Students are responsible for transportation to and from classroom, lab, and clinical sites. A minimum of two clinical sites will be utilized in the clinical portion of this class.

Prerequisite: Admission to Central Service Technician program 305341

#### Digital Literacy for Healthcare & 10501107 ......2 credits

The focus of this course is the use of technology in healthcare. Learners use common business software applications, including word processing, presentation, spreadsheet, and databases. Communication methods using technology are addressed. Learners gain experience with using the electronic health record (EHR). Healthcare EHR security issues, social media use, and digital healthcare resources are examined.

## General Anatomy & Physiology &

#### 10806177...... 4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236 or ACT of 15, or General Chemistry 10806134 with a grade of "C" or better, or General Biology 10806114 with a grade of "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **Human Body in Health and Disease**

31509302.....3 credits

Focuses on diseases that are frequently first diagnosed and treated in the medical office setting. Students learn to recognize the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis and prevention of common diseases.

#### Medical Law, Ethics, and Professionalism 10501109...... 2 credits

Prepares students to display professionalism and perform within ethical boundaries in the healthcare setting. Students maintain confidentiality, examine legal aspects of the medical record, perform risk management procedures, examine legal and bioethical issues, and demonstrate awareness of diversity.

### Medical Terminology &

10501101...... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Learners practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

### 

#### 10806197...... 4 credits

Examines microbial structure, metabolism, genetics, growth, and the relationship between humans and microorganisms. Disease production, epidemiology, host defense mechanisms, and the medical impact of microbes in the environment, industry, and biotechnology are also addressed. Prerequisite: General Anatomy & Physiology 10806177 with a "C" or better, or General Biology 10806114 with a "C" or better, or Plant Biology 10806184 with a grade of "C" or better



## CIVIL ENGINEERING **TECHNOLOGY-HIGHWAY TECHNICIAN**

Associate in Applied Science (AAS) Program Code: 10-607-4 **Total Credits: 68-69** 

Mid-State's Civil Engineering Technology-Highway Technician program prepares students to work in the design and construction of public projects like roads, bridges, parking structures, and stormwater management systems. This important work also includes railroad, pipeline, power line, dam, canal, wastewater treatment facility, and airport construction. Through hands-on exercises and a capstone design project, you'll learn how to support the work of civil engineers, designers, surveyors, and city planners. You'll also receive training in surveying, soils, construction material testing, computer drafting, estimating, site design, mapping, and inspection procedures.

Mid-State's Civil Engineering Technology-Highway Technician program courses provide the required educational hours to obtain the Professional Land Surveyor license; however, students need to complete four years of on-the-job experience in order to be eligible for licensure in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examinations, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

## CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s) Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_ With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





**ADAMS CAMPUS** 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street

STEVENS POINT CAMPUS 1001 Centerpoint Drive

WISCONSIN RAPIDS CAMPUS 500 32nd Street North

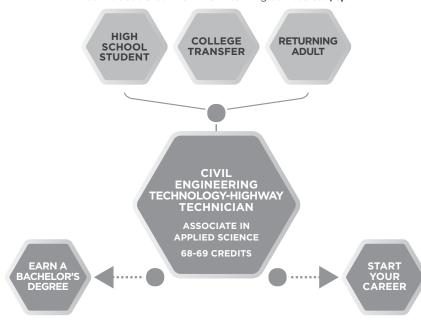
Marshfield, WI 54449 Stevens Point, WI 54481 Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

• Automation & Instrumentation Technology

#### **CAREER OPTIONS**

- AutoCAD Specialist
- Civil Engineering Technician
- Inspection/Quality Control Technician

#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), St. Cloud State University, University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Platteville, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Civil Engineering Technology-Highway Technician graduate, to be able to:

- Utilize graphic techniques to produce engineering drawings.
- Conduct standardized field and laboratory testing on civil engineering materials.
- Utilize modern surveying methods for land measurements and/or construction layout.
- Estimate material quantities and costs for civil engineering projects.
- Utilize geometric elements to develop corridors.
- Design storm systems to meet given design requirements.
- Determine forces and stresses in elementary structural systems.
- Employ productivity software to solve technical problems.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

NOTES:		

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### GPS for Student Success ☑

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

#### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

#### **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

Term	16 crec	lits
10103123 10607108	Excel-Beginning 🗹 Intro to Civil 3D 🗹	1 1
10607145 10607155	Soils Intro to Surveying 2*	3 2
10623106	Intro to AutoCAD	1
10623115 10801136	Intro to Engineering English Composition 1 🗹	1 3
10804118	Intermediate Algebra with Applications 🗹	4
Term	17 cred	lits
10103124 10487101	Excel-Intermediate &  Drones and Remote Sensing	1 1
10607110	Cemented Aggregate Mixtures	4
10607150 10607156	Civil Engineering Drafting I 🕏 Surveying - Total Station	3
10607167	Inspection	3 3 2 3
10804196	Trigonometry with Applications 🕏	5
<b>Term</b> 10607117	18-19 cred	lits 2
10607118	Land Records	1
10607160	Civil Engineering Drafting II Storm Water Management	2
10607171	Highway Surveying	3 2 2
10607174 10806143	GPS for Surveyors College Physics 1	3
10806154	-or- General Physics 1 🕏	4
10809166	Intro to Ethics: Theory & Application 🗷 -or-	·
10809195	Economics &	3
Term	17 cred	lite
10607149	Highway Bridges, Medians, & Barriers	3
10607166 10607180	Construction Estimating & Management Civil Engineering Capstone	3 2
10801196	Oral/Interpersonal Communication 🗷 -or-	_
10801198 10804195	Speech & College Algebra with Applications &	3 3
10809188 10809198	Developmental Psychology <b>© -or-</b> Intro to Psychology <b>©</b>	3
10009190	-	
	Total credits 68-	-69

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10607108	9 credit	<b>s</b>
10607155 10623106 10623115	Intro to Surveying  Intro to AutoCAD Intro to Engineering	2 1 1
10804118		4
<b>Term</b> 10607150 10607156 10607167		t 3 3 2 3
10804196	Trigonometry with Applications &	3
<b>Term</b> 10103123	7 credit Excel-Beginning 🗹	1
10607145 10801136	Soils English Composition 1 🕏	3 3
Term	8-9 credit	s
10103124 10487101 10806143	Excel-Intermediate  Drones and Remote Sensing College Physics 1 -or-	1 1 3
10806154 10809166	General Physics 1 2 Intro to Ethics: Theory & Application 2 -or-	4
10809195	Economics &	3
<b>Term</b> 10607160	<b>7 credit</b> Civil Engineering Drafting II	<b>s</b> 2
10607170 10607171	Storm Water Management	3 2
<b>Term</b> 10607110	Cemented Aggregate Mixtures	<b>s</b>
10607166 10607166 10804195	Construction Estimating & Management	3
<b>Term</b> 10607117	8 credit GIS Fundamentals	_
10607118	Land Records	2 1
10607174 10801196 10801198	Oral/Interpersonal Communication 🕝 -or-	2 3
Term	8 credit	S
10607149 10607180	Civil Engineering Capstone	3 2
10809188 10809198	Developmental Psychology <b>&amp; -or-</b> Intro to Psychology <b>&amp;</b>	3
	Total credits 68-69	9

### **Cemented Aggregate Mixtures**

10607110 ...... 4 credits

WisDOT standard tests and procedures are performed on aggregates, hot mix asphalt, and concrete in a lab environment. The behavior that results from material selection and mixture proportioning is evaluated through test results. Learners will design hot mix asphalt and concrete mixtures within WisDOT design parameters, HTCP certification is encouraged after completion of the course. Corequisite: Intermediate Algebra with Applications 10804118

#### **Civil Engineering Capstone** 10607180 .....2 credits

This capstone class is a project-based learning experience that allows students to integrate and demonstrate their civil engineering drafting, design, and survey skills by applying them to a specific engineering problem. Students collaborate in teams to apply their problem-solving and technology skills to a design experience. Working in collaboration with a faculty member, students plan, produce, document and present quality engineering designs. Students should be in their last semester of the Civil Engineering Technology program to enroll in this class. Prerequisites: Civil Engineering Drafting II 10607160, Storm Water Management 10607170, and Highway Surveying 10607171

#### Civil Engineering Drafting I & 10607150 ......3 credits

Students will use survey data to create and analyze existing ground surface models in Civil 3D. Students will also learn basic and advanced corridor modeling methods, create cross sections, analyze earthwork volumes, and apply dynamic annotation in order to produce construction drawings.

Prerequisite: Intro to Civil 3D 10607108

#### Civil Engineering Drafting II 10607160 ......2 credits

Expands on topics learned in Civil Engineering Drafting I. Topics covered include site layout and modeling, as well as sanitary sewer, water main, and dry utility layout and modelina.

Prerequisite: Civil Engineering Drafting I 10607150

#### College Algebra with Applications & 10804195 .....3 credits

Covers the skills needed for success in calculus and many application areas on a baccalaureate level. Topics include the real and complex number systems, polynomials, exponents, radicals, solving equations and inequalities (linear and nonlinear), relations and functions, systems of equations and inequalities (linear and nonlinear), matrices, graphing, conic sections, sequences and series, combinatories, and the binomial theorem.

Prerequisite: Trigonometry with Applications 10804196 with a grade of "C" or better or Intermediate Algebra with Applications 10804118 with a grade of "C" or better. Students without Trigonometry with Applications are encouraged to bring transcripts for individual course evaluation.

#### **College Physics 1**

10806143 .....3 credits

Presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation and applications. Topics include laboratory safety, unit conversions and analysis, kinematics, dynamics, work, energy, power, temperature and heat. Corequisite: Trigonometry with Applications 10804196

#### **Construction Estimating & Management** 10607166 ......3 credits

Presents goals and performance of quantity takeoff, cost estimation, and contract interpretation. Project bidding, construction techniques, and equipment capabilities are evaluated.

Prerequisites: Excel-Intermediate 10103124, Intermediate Algebra with Applications 10804118, and Intro to AutoCAD 10623106

#### Developmental Psychology & 10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### **Drones and Remote Sensing** 10487101 ......1 credit

This course will explore topics included in the Section 107 Drone Pilot License exam, as well as drone and remote sensing applications in the civil engineering industry. Students will have the opportunity to fly drones in order to capture data for use in engineering design. Corequisite: Civil Engineering Drafting I 10607150

### **Economics Z**

10809195 ......3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236. Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### English Composition 1 🗷

#### 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

#### Excel-Beginning &

#### 10103123.....1 credit

Students learn to create, modify, and format spreadsheets, charts, and graphics. Students also learn to perform calculations and analysis on data.

#### Excel-Intermediate 🗹

#### 10103124 .....1 credit

Students learn to summarize and analyze large data sets. Some of Excel's data tools and what-if tools are applied. Prerequisite: Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123

#### General Physics 1 2

#### 10806157...... 4 credits

Presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation, and applications. Topics include unit conversion and analysis, vectors, translational and rotational kinematics, translational and rotational dynamics, heat and temperature, and harmonic motion and waves. *Corequisite: Trigonometry with Applications 10804196* 

#### **GIS Fundamentals**

#### 10607117 .....2 credits

An introduction to geographic information systems (GIS) and how they are used to document and convey information that has a spacial component. Students use GIS software to create, manipulate, and present geographic information.

#### **GPS for Surveyors**

#### 10607174......2 credits

A GNSS surveying instrument and data collector are operated to collect field data and perform construction staking. Learners will explain the GNSS system and diagnose problems with data collection and use the data collector to analyze field data and create linework for stakeout. *Prerequisites: Intro to Surveying 10607155, Intro to Civil 3D 10607108.* 

## Highway Bridges, Medians, & Barriers 10607149 ......3 credits

Studies the processes, considerations, and safety aspects of constructing and maintaining highway bridges, medians, and barriers. Includes investigation of structural loads, stress factors, and valid design procedures for these critical components of today's modern roads and highways. *Prerequisite: Highway Surveying 10607171; Corequisite: Inspection 10607167* 

#### **Highway Surveying**

#### 10607171 .....2 credits

Learners will explain the geometry of horizontal curves, vertical curves and super elevation with consideration of WISDOT design requirements. Civil 3D and spreadsheet software are used to model basic curves and produce reports from the software that could be used for construction staking. Learners will also perform calculations manually in preparation for the NSPS-CST exam. Prerequisites: Intro to Surveying 10607155, Civil Engineering Drafting I 10607150; Corequisite: Trigonometry with Applications 10804196

#### Inspection

#### 10607167.....2 credits

Concerns construction inspection and its importance, the role of the inspector, requirements for a good inspector, and general duties of the inspector. Emphasizes concrete and asphalt inspection.

Prerequisite: Intro to Surveying 10607155

## Intermediate Algebra with Applications © 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Intro to AutoCAD

#### 10623106 ......1 credit

Learners will develop practical approaches to constructing basic 2D drawings in AutoCAD software by drawing, modifying, and assigning appropriate layer properties. Learners will also analyze length and area of shapes drawn in AutoCAD, summarize details through dimensions and annotations added to the drawings, and format the drawings for printing. Prior experience with computers is recommended.

#### Intro to Civil 3D 🗹

#### 10607108 .....1 credit

This introductory course in Civil 3D covers basic two-dimensional drafting concepts, including the layout of roads and parcels in a subdivision. Alignments, parcels, and dynamic labels will be created and explored using Civil 3D software

Corequisite: Intro to AutoCAD 10623106

#### Intro to Engineering

#### 10623115.....1 credit

Mathematical solutions are arranged through dimensional analysis, and this process is applied to a variety of engineering situations. Life cycle cost is evaluated to determine the cost effectiveness in decision making. Practical applications will enhance these fundamentals. Corequisite: Intermediate Algebra w/Apps 10804118 or consent of instructor

#### Intro to Ethics: Theory & Application & 10809166 .....3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Intro to Psychology & 10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Intro to Surveying 🗹 10607155.....2 credits

Learners will use basic surveying instruments to measure/ estimate horizontal lengths, an automatic level to determine elevation, and research survey data online. Resolve measurement errors and report results in appropriate formats. Create cross section and profile views from survey

Corequisite: Intermediate Algebra with Applications 10804118

#### **Land Records**

10607118 .....1 credit

Interpret land documents, including various types of property descriptions, Certified Survey Maps, and USGS maps. Interconvert azimuth, bearing, and turned angles. Assess evidence for corner restoration and research a local survey document.

Prerequisite: Civil Engineering Drafting I 10607150, Survey-Total Station 10607156

#### Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Soils

10607145 .....3 credits

Studies the general classification and properties of soil and subsurface materials. Includes subsurface exploration soil tests and hydraulic principles as used in the field of civil engineering. Laboratory techniques are developed for testing and classifying soil and aggregate.

Corequisite: Intermediate Algebra with Applications 10804118

### Speech 2

10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Storm Water Management**

10607170 ......3 credits

Emphasizes storm water management, calculations, planning, and design. Topics include open channel and pressure flow, storage and treatment facility design concepts, and regulation, permitting, and enforcement of sanitary and storm water ordinances.

Prerequisite: Civil Engineering Drafting I 10607150; Corequisite: Trigonometry with Applications 10804196

## **Surveying - Total Station**

10607156.....3 credits

Learners will operate a robotic total station and data collector to collect field data and perform construction staking. Civil 3D software is used to interpret field data, solve survey calculations, and convey plat information. Learners will manually perform calculations to confirm data collector solutions and to prepare for the written NSPS-CST exam. Learners will perform a traverse and adjust the results. Prerequisites: Intro to Surveying 10607155, Intro to Civil 3D 10607108. Corequisite: Trigonometry with Applications 10804196 and Civil Engineering Drafting I 10607150

#### **Trigonometry with Applications** 10804196 ......3 credits

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles, complex numbers, DeMoivre's Theorem, polar coordinates, and vectors. Prerequisite: Intermediate Algebra with Applications 10804118 with a grade of "C" or better. Students without Intermediate Algebra with Applications are encouraged to bring transcripts for individual course evaluation.



## **CONSTRUCTION TRADES**

**Technical Diploma** Program Code: 30-475-1

**Total Credits: 11** 

Mid-State's Construction Trades technical diploma provides the foundation knowledge and experience to get started in the construction, carpentry, plumbing, electrical, and pipefitting fields. Graduates understand the various components of building construction systems as well as proper and safe tool use and installation techniques for piping, heating, and electrical systems. Successful completion of the diploma prepares students for an entry-level position in the construction trades industry. The program includes work in an interactive hands-on lab and a year-round larger lab complete with an "indoor house." Through exposure to multiple fields and industries, graduates are prepared to enter the trade they choose.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711



MARSHFIELD CAMPUS 1001 Centerpoint Drive

MID-STATE

Wisconsin Rapids, WI 54494

STEVENS POINT CAMPUS WISCONSIN RAPIDS CAMPUS 500 32nd Street North

ADAMS CAMPUS 401 North Main Adams, WI 53910

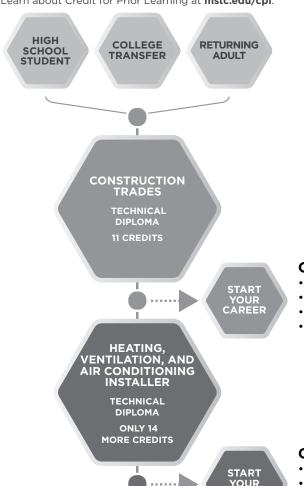
2600 West 5th Street Marshfield, WI 54449

Stevens Point, WI 54481

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

## APPRENTICESHIP OPPORTUNITIES

- Carpenter Apprenticeship
- Construction Electrician (ABC) Apprenticeship
- Construction Electrician (IBEW-NECA) Apprenticeship
- Plumber Apprenticeship
- Steamfitter and Steamfitter Service Apprenticeship

#### **CAREER OPTIONS**

- Electrical Contracting Laborer
- Carpentry Contracting Laborer
- Plumbing Contracting Laborer
- Apprenticeship

#### **CAREER OPTIONS**

- Building Controls Technician
- Heating, Ventilation, and Air Conditioning Installer
- Heating and Air Conditioning Mechanic
- Apprenticeship

## CAREER OPTIONS

- Energy Load Estimator
- Renewable Energy Technical Sales Representative
- Solar Installer
- Apprenticeship

#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

YOUR

CAREER

For more information and additional opportunities, visit mstc.edu/transfer.

RENEWABLE ENERGY TECHNICIAN ASSOCIATE IN APPLIED SCIENCE ONLY 36

MORE CREDITS

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Construction Trades graduate, to be able to:

- · Demonstrate construction safety.
- Use construction tools and equipment.
- Interpret construction documents and blueprints.
- Construct a building structure using wood framing techniques.
- Recognize plumbing, HVAC, and electrical systems.
- Comply with all applicable standards, policies, and procedures, including safety procedures and the maintenance of a clean work area.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Construction Fundamentals course.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

NOTES:			

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success ☐ 10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

Provides learners with the opportunities to develop and expand reading skills, including comprehension

and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

### Intro to College Writing

paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10442117	11 cre Welding Fundamentals 1 2*	edit
10476171	Safety for Construction Trades 🗷	1
10482107 10483121	Construction Fundamentals Piping Applications	2 3
10601130	Blueprint Reading for Construction Trades	2
10601140	Electricity for the Construction Trades	2
	Total credit	s 11

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

#### **SAMPLE PART-TIME CURRICULUM OPTION**

Term	4 cre	dits
10442117	Welding Fundamentals 1 🗹	1
10476171	Safety for Construction Trades 🗹	1
10482107	Construction Fundamentals	2
Term	7 cre	dits
10483121	Piping Applications	3
10601130	Blueprint Reading for Construction Trades	2
10601140	Electricity for the Construction Trades	2
	Total credit	ts 11

## **COURSE DESCRIPTIONS**

## Blueprint Reading for Construction Trades 10601130 ......2 credits

Develops the ability to read blueprints for commercial and non-commercial structures. Emphasizes blueprints drawn by licensed architects, covering plumbing, electrical wiring, structural framing, millwork, interior and exterior details, and basic information.

## Construction Fundamentals

foundations, walls, floors, roofs and roof materials, exterior finishes, interior walls, ceiling and floor finishes, insulation types, vapor and air infiltration, and sound protection. Students also become familiar with blueprint reading and examine all trades associated with construction, including, electrical, HVAC, and plumbing. Safe use of the appropriate tools for each trade is covered.

## Electricity for the Construction Trades 10601140......2 credits

This course is an introduction to electrical theory and application for those in the construction and building trades. Content includes AC and DC circuits, schematics, Ohms law, multimeter use and circuit troubleshooting. This course will also provide an introduction to the contents of the National Electric Code (NEC).

## Piping Applications

10483121.....3 credits

Presents the fundamentals of plumbing and piping installation practices. Laboratory activities provide students with basic pipe joining processes associated with the plumbing and HVAC industries.

## Safety for Construction Trades 10476171 ......1 credit

The Safety for Construction Trades course teaches construction related workers about their rights, employer responsibilities and how to identify, abate, avoid and prevent job related hazards. Students will familiarize themselves with the proper selection and use of personal protective equipment and safety requirements on a construction site for various activities. Course outcomes align with the training outcomes recommended by OSHA. Upon successful completion, students will receive an OSHA 10 Card.

## Welding Fundamentals 1 ☑ 10442117

An introduction to fundamental welding techniques with

an emphasis on safe work habits that covers the processes of FCAW, GMAW, and OXY-Fuel cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.



## **CRIMINAL JUSTICE-CORRECTIONS & COMMUNITY ADVOCACY**

## Associate in Applied Science (AAS) Program Code: 10-504-7

**Total Credits: 61** 

Unique in the Wisconsin Technical College System, the Criminal Justice-Corrections & Community Advocacy program at Mid-State teaches the operations and management of adult/juvenile correctional institutions, probation/parole, community advocacy agencies, special needs populations, alcohol and other drug abuse, and mental health services. Graduates may work in jails, prisons, juvenile detention facilities, halfway houses, and shelter care facilities as well as in the court system. Experienced faculty emphasize professionalism and integrity needed to work in these settings. You'll experience a blend of classroom theory, simulation, and occupational observation, setting you up for success in this field. Our state-of-the-art facilities include a reproduction of a secure detention facility to allow you to develop your skills in a safe yet challenging environment.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- ☐ Criminal Background Statement of Understanding and Release of Information Form

Other:			

mstc.edu 888.575.6782 TTY: 711



STEVENS POINT CAMPUS

1001 Centerpoint Drive

Stevens Point, WI 54481

WISCONSIN RAPIDS CAMPUS

MID-STATE

**ADAMS CAMPUS** 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

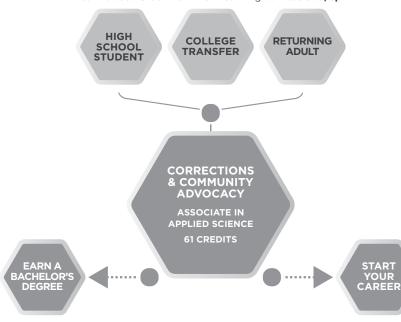
500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Advanced Emergency Medical Technician
- Criminal Justice-Law Enforcement 720 Academy
- · Criminal Justice-Studies
- Emergency Medical Technician
- Emergency Services Management
- EMT-Paramedic
- Fire Protection Technician
- Firefighter Technician
- · Paramedic Technician

#### **CAREER OPTIONS**

- Correctional/Juvenile Detention Officer
- 9-1-1 Telecommunicator
- · Probation & Parole Agent

#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Platteville, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Viterbo, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Criminal Justice-Corrections & Community Advocacy graduate, to be able to:

- Explain the components of and interrelationships in the criminal justice system.
- Apply appropriate communication skills to public safety incidents.
- · Establish situational safety.
- Engage effectively with vulnerable and disenfranchised individuals/populations.
- · Model a healthy lifestyle.
- Adhere to accepted culturally competent, ethical, and behavioral conduct.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will be assessed during scenario testing in the Advanced Relational Skills course.

You may be eligible to enter the jail officer certification track. Successful completion of the certification track provides the education and hands-on training required by the Wisconsin Law Enforcement Standards Board to become certifiable as a jail/colocated officer.

Anyone with a felony conviction cannot become a corrections officer without a governor's pardon. A lengthy criminal history or numerous moving traffic violations may hinder opportunities for employment.

#### PROGRAM PROGRESSION

In order to successfully complete the program, students must earn a grade of "C" or better in all program and general education courses required for graduation. Please note that the ability to repeat courses is dependent upon availability of courses.

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a jail officer is available at **mstc.edu/programs/corrections-community-advocacy**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### GPS for Student Success 🗷

an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 .....2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10504104 10504107 10504109 10801136 10801196 10801198	Intro to the Criminal Justice System Wellness for Rehabilitative Professionals Basic Professional Communications English Composition 1 & Oral/Interpersonal Communication & -or Speech &	redits
<b>Term</b> 10504105 10504106 10504116 10504179 10804107 10806189	Mental Health Contemporary Social Issues Probation & Parole & Management of Adult Population College Mathematics & -or- Introductory Statistics & -or- Basic Anatomy	redits
Term 10504128 10504178 10504184 10504165 10504167 10809166 10809188 10809198	Telecommunications Secure Detention & Basic Jail Academy 1 & -or- Basic Incarceration Principles Basic Jail Academy 2 & -or- Trauma & Resiliency Intro to Ethics: Theory & Application & Developmental Psychology & -or- Intro to Psychology & -or-	redits 2 2 3 3 3 3 3
<b>Term</b> 10504132 10504131 10504156 10504159 10504175 10809172 10809196	Advanced Relational Skills -or- Rehabilitative Professionals Internship Child Advocacy Interpersonal Violence/Victimology Understanding Substance Abuse Introduction to Diversity Studies & -or- Intro to Sociology &  Total cree	3 3 3 3 3 3 3 4 dits 61

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10504104 10504107	Intro to the Criminal Justice System Wellness for Rehabilitative Profession	6 credits 3 nals 3
<b>Term</b> 10504105 10504106 10801136	Mental Health Contemporary Social Issues English Composition 1 &	<b>9 credits</b> 3 3 3
<b>Term</b> 10504109 10801196 10801198	Basic Professional Communications Oral/Interpersonal Communication © Speech ©	<b>6 credits</b> 3 <b>7 -or-</b> 3
<b>Term</b> 10504116 10504179 10809166	Probation & Parole & Management of Adult Population Intro to Ethics: Theory & Application	9 credits 3 3 2 3
<b>Term</b> 10504128 10804107 10804189 10806189 10809172 10809196	Telecommunications College Mathematics & -or- Introductory Statistics & -or- Basic Anatomy Introduction to Diversity Studies & -o	8 credits 2 3 or- 3
<b>Term</b> 10504156 10504159	Child Advocacy Interpersonal Violence/Victimology	6 credits 3 3
<b>Term</b> 10504178 10504184 10504165 10504185 10504167	Secure Detention & Basic Jail Academy 1 & -or-Basic Incarceration Principles Basic Jail Academy 2 & -or-Trauma & Resiliency	8 credits 2 3 3
<b>Term</b> 10504132 10504131 10504175 10809188 10809198	Advanced Relational Skills -or- Rehabilitative Professionals Internshi Understanding Substance Abuse Developmental Psychology & -or- Intro to Psychology &  Total	<b>9 credits</b> p

#### **Advanced Relational Skills**

#### 10504132.....3 credits

Utilizes scenario-based instruction to prepare students in the use of specific techniques and processes required for effective communication in today's professional criminal justice professions. Emphasizes communication skills that enhance professional interactions within service professions. Learners will complete a basic resume, cover letter, and background packet. Learners will prepare for a criminal iustice career interview and participate in a mock interview with current practitioners. A program requirement for community service will also be tracked in this course. Prerequisite: Admission to Criminal Justice-Corrections & Community Advocacy program 105047

#### **Basic Anatomy**

10806189 .....3 credits

Examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236 or ACT of 15. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **Basic Incarceration Principles**

10504165 .....3 credits Learners will explore topics relating to the rights of

incarcerated populations, maintaining personal vigilance and environmental safety in detention facilities, caring for mentally and physically fragile populations, and communicating with inmates and facility staff. Corequisite: Trauma & Resiliency 10504167

#### Basic Jail Academy 1 2 10504184 .....3 credits

This State of Wisconsin jail preparatory training program includes the following topics: Introduction to Corrections, Principles of Subject Control, Maintain Jail Security, Jail Hostage Response, Professional Communication Skills, Ethics and Ethical Decision Making, Admit and Release Inmates, Inmate Supervision and Behavior Control, Supervision of Special Needs Inmates/Crisis Intervention, Prepare Reports, Correctional Law, Jail Health Care, Cardio-Pulmonary Resuscitation, Jail Fire Safety, Application: Scenarios/Simulations, and Testing/Evaluation. Once learners successfully complete this course and the Basic Jail Academy 2 course, they are eligible for certifiable status by the State of Wisconsin to work in a county jail. This is primarily a lab-based class.

Prerequisites: Admission to Criminal Justice-Corrections & Community Advocacy 105047 program, passing of a background check and medical screening; Corequisite: Basic Jail Academy 2 10504185

## Basic Jail Academy 2 2

10504185.....3 credits

This State of Wisconsin jail preparatory training program includes the following topics: Introduction to Corrections, Principles of Subject Control, Maintain Jail Security, Jail Hostage Response, Professional Communication Skills, Ethics and Ethical Decision Making, Admit and Release Inmates, Inmate Supervision and Behavior Control. Supervision of Special Needs Inmates/Crisis Intervention. Prepare Reports, Correctional Law, Jail Health Care, Cardio-Pulmonary Resuscitation, Jail Fire Safety, Application: Scenarios/Simulations, and Testing/Evaluation. Once learners successfully complete this course and the Basic Jail Academy 1 course, they are eligible for certifiable status by the State of Wisconsin to work in a county jail. This is primarily a lab-based class.

Prerequisite: Admission to Criminal Justice-Corrections & Community Advocacy 105047 program, passing of a background check and medical screening; Corequisite: Basic Jail Academy 1 10504184

### **Basic Professional Communications**

10504109 ......3 credits

Learners in this course will explore ways to effectively utilize oral and written communications in professional rehabilitation forums. Learners will acquire the skills to communicate professionally, while learning mediation, motivational interviewing and basic professional communication techniques.

### Child Advocacy

10504156 ......3 credits

Introduces the concepts of child advocacy with an emphasis on the public service professional's role in identifying and managing situations involving child abuse and neglect. Provides an overview of the field of child advocacy, and explores the role of child advocate in different professions as well as ethical, legal, and professional responsibilities. Takes a multi-disciplinary team approach to examining family problems related to poverty, drug abuse, and violence. Adverse Childhood Experiences (ACEs) are examined.

### College Mathematics 🗷

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra: 2) geometry and trigonometry: and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Contemporary Social Issues

10504106 ......3 credits

Learners in this course will examine contemporary social issues that affect the rehabilitative professions. Learners will gain an understanding of how major systems of power such as racism, sexism, classism, and heterosexism are integrated and result in numerous social conflicts.

## Developmental Psychology ©

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/ 16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## English Composition 1 2

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Interpersonal Violence/Victimology

10504159 ......3 credits

Explores interpersonal violence, defined as abuse that occurs between people who know each other and that can occur within or outside a family setting. This abuse involves one person who uses power and control over another through physical, sexual, or emotional threats or actions; economic control; isolation; or other kinds of coercive behavior. Explores different types of interpersonal violence, including physical abuse, bullying, dating/relationship violence, gang violence, and sexual violence.

## Intro to Ethics: Theory & Application & 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## 

10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Sociology &

10809196 .....3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to the Criminal Justice System 10504104......3 credits

This course is an introduction into the criminal justice system and it examines its components: law enforcement, court processes and corrections. Students will explore the qualifications and the selection process for the profession and will identify the duties and responsibilities of those who work within the criminal justice system.

## Introduction to Diversity Studies & 10809172......3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Introductory Statistics & 10804189 ......3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent.

## Management of Adult Population 10504179.....3 credits

Reviews the importance of working positively with the incarcerated adult population. Focuses on the practice of constructive interaction skills, including positive behavior control, dispute resolution, and incident debriefing. Learners explore belief systems, social pressure, moral problems, decision making, and the consequences of decisions. *Prerequisite: Admission to Criminal Justice-Corrections & Community Advocacy program 105047* 

### Mental Health

10504105 .....3 credits

Learners in this course will receive an overview of crisis intervention. The conceptual framework for crisis intervention practice, including crisis theory, crisis concepts, and crisis intervention models and strategies will be explored.

## Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Probation & Parole ©

Analyzes modern probation and parole practices and services, examines current probation procedures and the

case law affecting those decisions. Reviews the advantages of community-based treatment and special programs. Through learning activities, students are exposed to a portion of the "daily life" of a probation and parole agent.

## Rehabilitative Professionals Internship 10504131 ......3 credits

Learners in the internship will be provided an excellent opportunity to experience the wide variety of duties and responsibilities of rehabilitative professionals in the field. Students interested in an internship with an agency will participate in an application and interview process to facilitate the selection and placement process. Selected applicants will complete 144 hours in their internship. There is an additional 18 hours of in-class lecture. Acceptance to an agency may be impacted based on findings of a background check and specific agency criteria. *Prerequisite: Admission to Criminal Justice-Corrections & Community Advocacy program 105047* 

## Secure Detention ©

10504178.....2 credits

Reviews theories of adolescent development, history of juvenile court, the Wisconsin Juvenile Justice Code, and the Wisconsin Administrative Code as it applies to juvenile offenders. Learners become familiar with procedures to admit/release adolescents in secure detention. Learners also apply strategies for effective supervision, protection, and discipline of juveniles and adolescents in secure detention settings, including those classified as specialneeds offenders. Students meeting all requirements of this course they will be certifiable to work in a juvenile detention colocated facility in the State of Wisconsin.

Prerequisite: Admission to Criminal Justice-Corrections & Community Advocacy program 105047

#### Speech 🗷

#### 10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

#### **Telecommunications**

#### 10504128.....2 credits

Examines the duties of a 9-1-1 telecommunicator and their role in the public safety team. Focuses on how to handle an emergency when someone calls or radios for help. Further, the learner will review roles and responsibilities, legal aspects, interpersonal communications, trending technology, telephone techniques and call processing, call classification, and radio communications. Learners will discover how to take care of themselves as a 9-1-1 telecommunicator.

#### Trauma & Resiliency

#### 10504167.....3 credits

Learners will explore the causes and effects of trauma and poverty on youth and adult disenfranchised populations. Through the principles of Trauma Informed Care, learners will experience resiliency-building techniques and practice strategies for communicating and advocating for people affected by trauma.

Corequisite: Basic Incarceration Principles 10504165

## Understanding Substance Abuse

#### 10504175.....3 credits

Examines the problems of drug abuse and issues across the spectrum, including the latest thoughts about prevention and awareness. Provides an understanding of the origins and current status of drug use, including special situations addressed for a person who may be experiencing problems with substance abuse. Assessment, intervention, rehabilitation, and recovery are also introduced.

## Wellness for Rehabilitative Professionals 10504107 ......3 credits

Learners in this course will explore and understand the importance of self-care in the rehabilitative professions. The points of focus will include stress management, dimensions of wellness, compassion fatigue, resilience, secondary trauma, and burn-out risks.



## **COSMETOLOGY**

Technical Diploma
Program Code: 31-502-1

**Total Credits: 33** 

Combined with successful completion of the state licensing exam, Mid-State's Cosmetology program provides the theory and practice you need to build your cosmetology career. Students study hair cutting, perming/relaxing, and styling as well as facial and scalp treatments, barbering, makeup, pedicuring, manicuring, and more. The program emphasizes sanitation and safety. You'll learn from experienced instructors, guest lectures, demonstrations, industry representatives, and platform artists. Your practice will progress from working on mannequins to providing services in the on-campus salon. Many other hands-on opportunities are available, including job shadowing.

Mid-State's Cosmetology program prepares students to obtain the required licensure to be employed/practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examination, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:

\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449



WISCONSIN RAPIDS CAMPUS

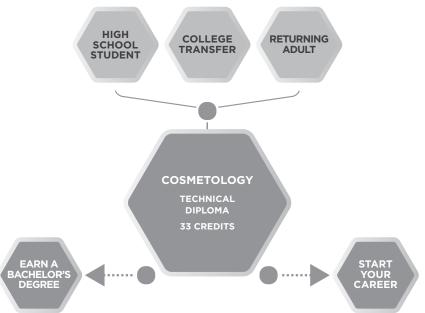
500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Barber Technologist
- · Nail Technician

#### **CAREER OPTIONS**

- Cosmetologist
- Makeup Artist
- Manicurist/Pedicurist

#### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Cosmetology graduate, to be able to:

- · Apply safety and sanitation procedures.
- Adhere to the current Wisconsin administrative codes and statutes for cosmetology.
- Demonstrate interpersonal skills for success.
- · Perform hair cutting services.
- Perform shampoo services.
- Perform skin care services.
- · Perform texture services.
- · Perform hair color services.
- Demonstrate hair styling and finishing techniques.
- · Perform nail services.
- Develop strategies to market products and services.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will complete a mock board exam in the Capstone Experience course to fulfill the TSA requirement.

Most classes are offered in a face-to-face format. Theory of General Sciences is offered only in an online format. Work on mannequins, other students, and in an on-campus salon completes the practical component of your training.

Students must purchase a kit of required tools and supplies. The cost of the kit is approximately \$1,700 and must be purchased for use on the first day of class.

Students who successfully complete the program will meet the Wisconsin requirement of 1,550 hours of theoretical and practical instruction. Financial aid and scholarships are available to those who qualify.

#### **TECHNICAL STANDARDS**

Students must have good fine motor skills, especially finger dexterity, as well as good hand-eye coordination and 20/40 vision in best eye with 70 degrees to each side for peripheral vision, as determined by the Department of Transportation.

#### PROGRAM PROGRESSION

In order to progress in and successfully complete the program, students must repeat core courses (courses numbered 31-502-xxx) not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequistes.

Please note that the ability to repeat courses is dependent upon availability of courses. Students may be required to apply for program re-entry in order to repeat courses.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### 

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 31502334 31502335 31502336 31502340 31502347	Haircutting Chemical Texture Services Nail Technology Facials	14 credits
<b>Term</b> 31502316 31502338 31502342 31502344		13 credits
	Salon Communication & Manageme Salon Sales & Marketing  Total	6 credits nt 3 3 credits 33

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

#### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 31502316 31502335 31502336 31502338	Chemical Texture Services	8 credits 1 3 3 1
<b>Term</b> 31502340 31502343 31502347	Salon Client Relations	8 credits 1 4 3
<b>Term</b> 31502334 31502344	Hairstyling Salon Ecology & Industry Trends	7 credits 3 4
<b>Term</b> 31502337 31502349 31502342		7 credits 1 1 3 3
<b>Term</b> 31502350	Salon Sales & Marketing  Total of	3 credits 3 credits 33

## **COURSE DESCRIPTIONS**

### Capstone Experience

31502342 ......3 credits

Students prepare for the state board exam and for securing a job. Students complete a mock assessment of all state board practical and written concepts, including state law. Students also prepare for their job search and for working with the business side of the cosmetology industry. Corequisite: Admission to the Cosmetology program 315021 and consent of instructor

#### **Chemical Texture Services**

31502336 ......3 credits

Includes the basics of safe and sanitary permanent waving and chemical hair relaxing. Includes history and product knowledge of these chemical services as well as advanced techniques and procedures that define current trends in the salon.

Prerequisite: Admission to Cosmetology program 315021

#### **Facials**

31502340.....1 credit

Students learn the different types of skin and study structure and functions of the skin. Applies basic facial techniques. Students will study microdermabrasion, laser hair removal, and chemical peels. They also perform basic skin waxing techniques,removal of superfluous hair, makeup application, false eyelash application, and skin analysis. *Prerequisite: Admission to Cosmetology program 315021* 

#### Haircolor

31502347 ......3 credits

Covers hair-color basics which include the law of color, the color wheel, and the theory behind these concepts. Students identify the chemicals used in hair color and discover the differences between temporary, semi/demi, and permanent color. Students mix and apply color while developing skills and building client consultation techniques. Studies application methods governed by the state board regulations. Also teaches the study of bleach theory and complete lightening applications, including foiling. Students experience advanced color formulations, color placement techniques, and color correction procedures. *Prerequisite: Admission to Cosmetology program 315021* 

#### Haircutting

31502335 ......3 credits

Involves designing haircuts, understanding form, and applying various haircutting techniques. Students perform various haircuts, including blunt, uniform, increased, and graduated haircuts. Students also perform men's haircuts including razor cutting, shear over comb, clipper cutting clipper over comb, short tapered, and flattops. Trimming techniques used for men's facial hair are also emphasized and practiced, including shaving, beards, mustaches, and side burns.

Prerequisite: Admission to Cosmetology program 315021

#### Hairstyling

31502334 ......3 credits

Emphasizes wet and dry hairstyling to include rollers, airforming, thermal styling, hair straightening, finger waving, pin curls, hair analysis, shampooing, scalp treatments, braiding, long hair design, and hair pressing. Fundamentals of thermal styling and comb-outs are performed. Practical aspects of hair enhancements including wigs, hair extensions, and hair pieces will also be performed. *Prerequisite: Admission to Cosmetology program 315021* 

### Nail Technology

31502337.....1 credit

Students achieve skills in manicuring, pedicuring, and nail enhancement services, including polish application and massage techniques. Students study nail shape and safe and sanitary use of nail care products. Paraffin hand dips, advanced polish techniques, and various nail art application are practiced.

Prerequisite: Admission to Cosmetology program 315021 or Nail Technician program 305024

### Salon Client Relations

31502343 ...... 4 credits

Students refine their professional communication and consultation skills with clients as they continue to increase their salon quotas. Students gain confidence and speed in their advancing skills and also earn 25 hours of off-campus training.

Corequisite: Salon Operations 31502338

## Salon Communication & Management 31502349 ......3 credits

alon sorvico skills, students

While continuing to practice salon service skills, students focus on communicating with other stylists and with challenging clients in stressful situations. Students also look at the business side of the industry as they analyze business plans, handbooks, and vision and mission statements. *Corequisite: Salon Operations 31502338* 

## Salon Ecology & Industry Trends

31502344...... 4 credits

The field of cosmetology is built on hairstyle trends. This course examines those trends as students practice the techniques necessary to create contemporary and creative styles. This course also looks at ecological salon practices and protections for clients and workers and includes 25 hours of off-campus training.

Corequisite: Salon Operations 31502338

#### **Salon Operations**

31502338 ......1 credit

Focuses on developing front desk and client relation skills including managing bookings and applying sanitation standards to dispensary practices. Emphasizes daily operations of a salon and the professional attitudes needed to be successful in the industry.

Corequisites: Haircolor 31502347, Hairstyling 31502334, Haircutting 31502335, Chemical Texture Services 31502336, Nail Technology 31502337, and Facials 31502340

### Salon Sales & Marketing

31502350 ......3 credits

Using technology, students learn to analyze their productivity reports and manage point of sale operations for each of their clients. Included in this course is a focus on how to market products and services to clients through the creation of salon marketing materials.

Corequisite: Salon Operations 31502338

### Theory of General Sciences

31502316 ...... 1 credit

Covers several general science topics integral to the field of barbering/cosmetology, including bacteriology, infection control, properties of the hair and scalp, nail structure and growth, skin diseases and disorders, introduction to electrology, the basics of electricity, chemistry, and anatomy and physiology. This course is offered online only. *Prerequisite: Admission to Cosmetology program 315021* 



## **CRIMINAL JUSTICE-LAW ENFORCEMENT 720 ACADEMY**

**Technical Diploma** 

Program Code: 30-504-2

**Total Credits: 22** 

This program is specifically designed for students with a minimum of 60 college credits who seek to meet the certification requirements necessary to become a law enforcement officer in the state of Wisconsin. Students must meet the entrance requirements as set forth by the Wisconsin Department of Justice.

Mid-State's Criminal Justice-Law Enforcement 720 Academy prepares students to obtain state certification to be employed/practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examinations, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When: With:

Official Transcripts Mid-State Technical College

Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481

Other:	

mstc.edu 888.575.6782 TTY: 711





WISCONSIN RAPIDS CAMPUS

MID-STATE

**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481

500 32nd Street North Wisconsin Rapids, WI 54494

Adams, WI 53910

**ADAMS CAMPUS** 

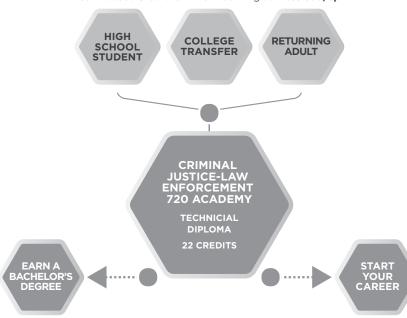
401 North Main

## **CAREER PATHWAY**

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Advanced Emergency Medical Technician
- Criminal Justice-Corrections & Community Advocacy
- Criminal Justice-Studies
- Emergency Medical Technician
- Emergency Services Management
- EMT-Paramedic
- Fire Protection Technician
- Firefighter Technician
- Paramedic Technician

#### **CAREER OPTIONS**

- · Police Officer
- · Conservation Officer
- · Deputy Sheriff

#### **BACHELOR'S DEGREE OPTIONS**

Herzing University and UW-Stevens Point

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Criminal Justice-Law Enforcement 720 Academy graduate, to be able to:

- · Think critically.
- Manage emergencies.
- · Communicate effectively.
- Demonstrate professionalism.
- · Conduct investigations.
- · Interact with others.
- · Demonstrate technical skills.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will complete the TSA requirements through scenario testing at the end of the program.

Anyone with a felony conviction or a domestic abuse conviction cannot become a law enforcement officer without a governor's pardon. Numerous moving traffic violations or a lengthy criminal history or mental illness that prevents the applicant from performing essential job functions may hinder opportunities for employment.

#### **ADDITIONAL ENTRY CRITERIA**

To apply to the Criminal Justice-Law Enforcement 720 Academy program:

- The applicant shall have attained a minimum age of 18 years.
- The applicant shall possess a Wisconsin high school diploma or a diploma issued by an out-of-state high school accredited by an appropriate agency of the state or have a General Education Development (GED) Certificate or a High School Equivalency Diploma (HSED). In Wisconsin, high school diplomas are issued by public and private schools. A home-based private educational program does not lead to a traditional Wisconsin high school diploma. A student who is enrolled in a home-based private educational program must attain a GED or HSED to be eligible for preparatory law enforcement officer training.
- The applicant shall possess a valid Wisconsin driver's license or such other valid operator's permit recognized by the Wisconsin department of transportation as authorizing operation of a motor vehicle in Wisconsin.
- The applicant shall not have been convicted of any federal felony or of any offense that if committed in Wisconsin could be punished as a felony unless the applicant has been granted an absolute and unconditional pardon.
- The applicant shall not have been convicted of any misdemeanor crime of domestic violence unless the applicant has been granted an absolute and unconditional pardon.

- The applicant shall not be prohibited by federal or state law from possessing a firearm.
- The applicant shall be a United States citizen.
- The applicant shall possess either a two-year associate degree from a Wisconsin Technical College System district or its accredited equivalent from another state or a minimum of 60 accredited semester credits or 90 accredited quarter credits. An official college transcript from the educational institution where credit was awarded shall serve as evidence of an applicant having met the associate degree or college credit requirement. School accreditation can be checked at the US Department of Education website.
- A physical assessment shall be conducted to verify that the applicant can meet the physical standards required of a law enforcement officer. The assessment shall be conducted by a Wisconsin licensed physician who shall provide a signed written report on the results of the assessment to the training school.
- An oral interview shall be conducted with a panel of law enforcement executives or with teaching or counseling staff affiliated with the training school to determine the applicant's suitability for law enforcement officer employment and to assess the applicant's demeanor, background, and ability to communicate.
- Physical ability will be tested prior to entrance into a preparatory law enforcement officer training academy and again during Phase 3 of the academy. There are both entrance and exit standards for passing the Physical Readiness Test.

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a law enforcement officer is available at **mstc.edu/programs/criminal-justice-studies**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

#### **PROGRAM PROGRESSION**

In order to successfully complete the program, students must:

 Receive a grade of "C" or better in all courses required for graduation. Please note that the ability to repeat courses is dependent upon availability of courses.

#### STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

## SAMPLE FULL-TIME CURRICULUM OPTION

Term 22 cre	dits
30504500 Overview of Patrol Response	2
30504500 Overview of Fathor Response	1
30504502 Application of Investigations	1
30504503 Overview of Criminal Justice	1
30504504 Principles of Emergency Vehicle Response	2
30504505 Sensitive Crimes	2
30504506 Overview of Investigations	2
30504507 Application of Traffic Response	3
30504508 Principles of Investigations	1
30504509 Principles of Tactics	5
30504510 Overview of Tactics	1
30504511 Scenario Assessment	1
Section 7 Section 7 Section 7	•
Total credits	22
Total cicality	,

NOTES:		

#### Application of Investigations

30504502.....1 credit

Through classroom lecture, and on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Phase II topics of the Department of Justice 720 Academy curriculum framework: Ethics II: Moral Reasoning and Professional Responsibility, Cultural Competence II: Fair and Impartial Policing, Interrogations, Testifying in Court, and Crimes III.

Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process.

## Application of Traffic Response 30504507.....3 credits

Through classroom lecture, and on-campus lab and WI Department of Justice integration exercises, students will learn and apply skills addressed in the following Phase III topics from the WI Department of Justice 720 Academy curriculum framework: Traffic Law Enforcement - Core and Radar, Traffic Crash Investigations & Incident Management, Operating a Motor Vehicle While Intoxicated (OMVWI), Standardized Field Sobriety Tests (SFST), Hazardous Materials and Weapons of Mass Destruction (WMD), Incident Command Systems and NIMS, and Report Writing. Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process

## Overview of Criminal Justice 30504503.....1 credit

Through classroom lecture and Wisconsin Department of Justice 720 Academy integration exercises, students learn and apply skills addressed in the following Wisconsin Department of Justice 720 Academy Phase I curriculum framework topics: Academy Orientation, Fundamentals of Criminal Justice, Ethics, Cultural Competency, Agency Policy, and Professional Communication.

Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process

## Overview of Investigations 30504506......2 credits

Through classroom lecture, on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase I topics: Constitutional Law I, Crimes I,

Interviews, and Report Writing.

Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process

#### **Overview of Patrol Response**

30504500 .....2 credits

Through classroom lecture, on-campus lab, and Wisconsin Department of Justice integration exercises, students will learn and apply skills addressed in the following Wisconsin Department of Justice 720 Academy curriculum framework Phase I topics: Critical Thinking and Decision-Making, Basic Response (RESPOND), Radio Procedures, Introduction to TraCS, Traffic Law Enforcement, and First Aid/CPR/AED. Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process

#### **Overview of Tactics**

30504510 .....1 credit

Through classroom lecture, on-campus lab, and Wisconsin Department of Justice 720 Academy integration exercises, students learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase I topics: Fundamentals of Firearms, Vehicle Contacts I, Officer Wellness, and Defensive and Arrest Tactics. Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process

#### **Physical Fitness**

30504501 .....1 credit

Through classroom lecture and on-campus lab students will apply Phases I-III Health Fitness WI Department of Justice 720 Academy curriculum framework program requirements and Officer Wellness Suicide Prevention.

Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process

## Principles of Emergency Vehicle Response 30504504 ......2 credits

Through classroom lecture, on-campus lab, and Wisconsin Department of Justice 720 Academy integration exercises, students learn and apply skills addressed in the following Department of Justice 720 Academy Phase II topics: Emergency Vehicle Operation and Control (EVOC) and Vehicle Contacts II.

Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process

## Principles of Investigations

30504508.....1 credit

Through classroom lecture, and on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Phase II topics of the WI Department of Justice 720 Academy curriculum framework: Constitutional Law II, Physical Evidence Collections, and Crisis Management. The Phase II Written Exam will be given in this course. Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process

#### **Principles of Tactics**

#### 30504509.....5 credits

Through classroom lecture and on-campus lab and integration exercises, students will learn and apply skills addressed in the following Phase II topics from the Department of Justice 720 Academy curriculum frameworks including: Professional Communication Skills II, DAAT, Firearms II, Tactical Response, and a Tactical Emergency Casualty Care.

Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process

#### **Scenario Assessment**

#### 30504511 .....1 credit

The scenario week is divided into two components: training and testing. The goal of the training component is to further develop and consolidate students' skills and abilities to perform in realistic law enforcement situations. The goal of the testing component is to assess whether students' performance in realistic law enforcement situations meets established criteria. The scenario testing component is graded and students must earn a passing grade to successfully complete preparatory law enforcement training. Prerequisite: Admission to Criminal Justice-Law Enforcement Academy program 305042 and must successfully complete the application process

#### **Sensitive Crimes**

#### 30504505......2 credits

Through classroom lecture, and on-campus lab and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase III topics: Domestics, Juvenile Law, Victims, Sexual Assault, and Child Maltreatment. The DOJ Phase III Written Examination will be administered in this course.

Prerequisite: Admission to Criminal Justice-Law Enforcement 720 Academy program 305042 and must successfully complete the application process



# CRIMINAL JUSTICE-STUDIES

# Associate in Applied Science (AAS) Program Code: 10-504-5

**Total Credits: 60** 

The Criminal Justice-Studies program prepares students to meet the challenges that come with a variety of positions in the criminal justice field. Graduates interested in pursuing a career as a law enforcement officer are prepared for entry into the 720-hour certification training required for law enforcement certifiable status by the Wisconsin Department of Justice. Graduates who do not seek sworn law enforcement positions may use their skills in civilian law enforcement positions, such as record and documentation maintenance, dispatch or communications center operations, or secure correctional facility operations. This program is designed to help secure employment, keep students abreast of rapidly changing advancements, and encourage further education. Experienced instructors emphasize professionalism, integrity, and quality work performance, with a significant focus on high ethical and moral standards.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

#### **CHECKLIST:**

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Criminal Background Statement of Understanding and Release of Information Form

Other:			

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

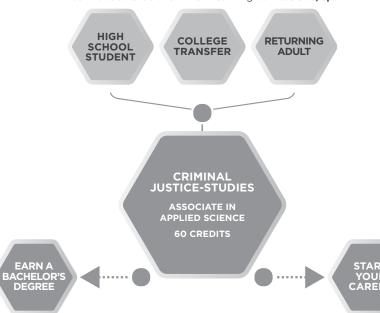
500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Advanced Emergency Medical Technician
- Criminal Justice-Corrections & Community Advocacy
- Criminal Justice-Law Enforcement 720 Academy
- Emergency Medical Technician
- Emergency Services Management
- EMT-Paramedic
- Fire Protection Technician
- Firefighter Technician
- Paramedic Technician

#### **CAREER OPTIONS**

- · Police Officer
- State Trooper
- · Deputy Sheriff

#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Parkside, UW-Platteville, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Viterbo, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit **mstc.edu/transfer**.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Criminal Justice-Studies graduate, to be able to:

- Examine the components of and interrelationships in the criminal justice system.
- Analyze situational responses.
- Apply communication skills as a criminal justice professional.
- · Conduct investigations.
- Adhere to the professional code of ethics for a criminal justice practitioner.
- Maintain personal wellness.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will be assessed on TSA outcomes during their Criminal Investigation and Wellness in Protective Services courses.

Upon graduation from the Criminal Justice-Studies program, you may be eligible to enter the Criminal Justice-Law Enforcement 720 Academy (30-504-2). Successful completion of the Criminal Justice-Law Enforcement 720 Academy provides the education and hands-on training required by the Wisconsin Law Enforcement Standards Board to become certifiable as a law enforcement officer. Entrance and exit physical fitness readiness standards as established by the Wisconsin Department of Justice must be met in order to participate in and complete the Criminal Justice-Law Enforcement 720 Academy.

Anyone with a felony conviction or a domestic abuse conviction cannot become a law enforcement officer without a governor's pardon. Numerous moving traffic violations or a lengthy criminal history or mental illness that prevents the applicant from performing essential job functions may hinder opportunities for employment.

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a law enforcement officer is available at **mstc.edu/programs/criminal-justice-studies**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

#### PROGRAM PROGRESSION

In order to successfully complete the program, students must earn a grade of "C" or better in all program and general education courses required for graduation. Please note that the ability to repeat courses is dependent upon availability of courses.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success ☐ 10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing 10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10504112 10504114 10504143 10801136 10809188 10809198	Court Procedures Introduction to Law Enforcement  Criminology English Composition 1  Developmental Psychology  Intro to Psychology	dits 3 3 3 3
<b>Term</b> 10504129 10504140 10504163 10504166 10801196 10801198	Community Policing Report Writing for Protective Services Constitutional Law for LE Criminal Justice Ethics Oral/Interpersonal Communication & -or- Speech &	3 3 3 3 3
<b>Term</b> 10504103 10504115 10504125 10504164 10504196 10804107 10804189	Fitness for Law Enforcement Contemporary Issues in Law Enforcement Patrol Procedures Criminal Law for LE Criminal Justice Internship -or- Criminal Justice Applications College Mathematics & -or- Introductory Statistics &	dits
<b>Term</b> 10504123 10504134 10504144 10809122 10809196 10809172	Criminal Investigation Intro to LE Organizations and Leadership Wellness in Protective Services Intro to American Government & -or- Intro to Sociology & Introduction to Diversity Studies &	3 3 3 3 3
	Total credits	60

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

## SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10504112 10504114 10801136	Court Procedures Introduction to Law Enforcement & English Composition 1 &	9 credits 3 3 3
<b>Term</b> 10504140 10504166 10801196 10801198	Report Writing for Protective Service Criminal Justice Ethics Oral/Interpersonal Communication of Speech of	3
<b>Term</b> 10504143 10804107 10804189 10809188 10809198	Criminology College Mathematics & -or- Introductory Statistics & Developmental Psychology & -or- Intro to Psychology &	<b>9 credits</b> 3 3
<b>Term</b> 10504129 10504163 10809122 10809196	Community Policing Constitutional Law for LE Intro to American Government & -or Intro to Sociology &	9 credits 3 3 -
<b>Term</b> 10504115 10504125 10504164	Contemporary Issues in Law Enforce Patrol Procedures Criminal Law for LE	9 credits ement 3 3 3
<b>Term</b> 10504134 10504123 10504144	Intro to LE Organizations and Leade Criminal Investigation Wellness in Protective Services	9 credits rship 3 3 3
<b>Term</b> 10504103 10504195 10504196 10809172	Fitness for Law Enforcement Criminal Justice Internship -or- Criminal Justice Applications Introduction to Diversity Studies &  Total C	6 credits 1 2 3 credits 60

### College Mathematics 🗷

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Community Policing**

10504129 ......3 credits

Learners will analyze key components of Community Policing including community partnerships, organizational transformation and problem solving. They will examine the role of the patrol officer in relation to community-oriented and problem-oriented policing. Learners will identify community-oriented needs and work directly in the field with community partners to develop a plan for implementation. Prerequisites: Admission to Criminal Justice-Studies program 105045 and Court Procedures 10504112, Introduction to Law Enforcement 10504114

#### **Constitutional Law for LE**

10504163 .....3 credits

Learners will explore constitutional law as it relates to the legal basis of the action and limits of law enforcement regarding topics such as arrest, use of force, and search and seizure. Learners will examine the requirements under Wisconsin law guiding law enforcement agency policy and procedures. Prerequisites: Admission to Criminal Justice-Studies program 105045, Court Procedures 10504112 and Introduction to Law Enforcement 10504114

## Contemporary Issues in Law Enforcement 10504115 ......3 credits

Studies current police issues related to law enforcement and community attitudes. The course builds a strong basis for the discussion of ethical decision making and the need for a professional mindset. A component to this class focuses on community involvement. Students will identify community organizations in need of volunteers and complete 10 hours of service with those organizations.

Prerequisites: Admission to Criminal Justice-Studies program 105045 and Intro to Law Enforcement 10504114

#### **Court Procedures**

10504112 .....3 credits

Learners examine the court system to include the formation and design of the courts, the key roles of the courts, and the application of law in the courts. The differences between the federal and state systems are explored. The roles and authority of law enforcement, prosecutors, defense attorneys, and judges are investigated. A main focus is dissecting each stage of a criminal case from the initial arrest through the final appeal.

Prerequisite: Admission to Criminal Justice-Studies program 105045

## **Criminal Investigation**

10504123.....3 credits

This course covers crime scene investigation and criminalistics, and the laws that govern them. Learners will focus on how a crime scene should be investigated, searched and processed for evidence. Learners will search crime scenes, collect and preserve physical evidence and interview victims and witnesses.

Prerequisites: Admission to Criminal Justice-Studies program 105045, Intro to Law Enforcement 10504114, Court Procedures 10504112, Criminal Law for LE 10504164, Patrol Procedures 10504125 and Contemporary Issues for LE 10504115

## Criminal Justice Applications

10504196 ......2 credits

This course will offer students who don't wish to do an internship an opportunity to meet and complete many of the same objectives. Learners will explore different aspects of the law enforcement career and work on job skills such as resumes, cover letters and interviews.

Prerequisites: Community Policing 10504129, Report Writing 10504140, Constitutional Law for LE 10504163, Criminal Justice Ethics 10504166, and Criminology 10504143

## Criminal Justice Ethics

10504166 .....3 credits

Introduces learners to ethical duties and decision making dilemmas facing criminal justice professionals. Provides the basic foundations of ethical reasoning and the standards for determining sound ethical decision making. Increases the learner's application of ethical reasoning in the face of agency corruption, use of force, gender and race discrimination, due process, and duty towards others. *Prerequisite: Admission to Criminal Justice-Studies program 105045* 

## Criminal Justice Internship

10504195 .....2 credits

The internship offers learners an excellent opportunity to experience first-hand, the wide variety of duties and responsibilities of criminal justice professionals in the field. Students interested in an internship with an agency will fill out an application and go through an interview process to determine placement eligibility. NOTE: Host agencies criteria for acceptance as an intern may impact a student's ability to participate in this course.

Prerequisites: Community Policing 10504129, Report Writing 10504140, Constitutional Law for LE 10504163, Criminal Justice Ethics 10504166, and Criminology 10504143

#### **Criminal Law for LE**

#### 10504164 .....3 credits

Learners will identify concepts specific to criminal law to include the purpose, scope, and sources of law. Students will analyze Wisconsin State Statutes to learn about Wisconsin's crimes against people, property, and other forms of criminal behavior. Learners will study how the criminal code is enforced with regard to juveniles in Wisconsin.

Prerequisites: Admission to Criminal Justice-Studies program 105045, Introduction to Law Enforcement 10504114 and Court Procedures 10504112

## Criminology

#### 10504143 .....3 credits

Learners will explore crime causation to include sources of data used to analyze crime, demographics of victims and offenders, and the main theories on crime causation. The main crime causation theories will be explored and used to analyze crime on a societal and individual level.

Prerequisite: Admission to Criminal Justice-Studies program 105045

## Developmental Psychology &

#### 10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## English Composition 1 &

### 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Fitness for Law Enforcement 10504103 ......1 credit

This course is designed to get students prepared for the physical fitness demands of law enforcement. Learners will identify healthy habits and explore ways to make fitness a part of their daily lives to build the foundation for a healthy career. Learners will be prepared to meet the physical entrance standards for the DOJ recruit academy. Prerequisites: Admission to Criminal Justice-Studies program 105045, Introduction to Law Enforcement 10504114, and Court Procedures 10504112

## Intro to American Government & 10809122......3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to LE Organizations and Leadership 10504134 ......3 credits

Learners will examine effective leadership strategies to include concepts on transformational leadership, collaborative leadership, and organizational leadership. Students will identify areas that they can immediately develop regarding their leadership skills and learn how to apply those skills in the future.

## Intro to Psychology 🗹

#### 10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Sociology ©

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Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Introduction to Diversity Studies © 10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Introduction to Law Enforcement & 10504114 ......3 credits

Explores who the police are, what they do, and how they do it. The course provides a general overview of policing in our society so that learners can understand why and how policing is performed. Addresses jobs available in policing, how to get them, what skills you will need and what you will do when you get those jobs. Learners will get a clear look at policing to help them determine if this career is for them. Prerequisite: Admission to Criminal Justice-Studies program 105045

### Introductory Statistics &

10804189 .....3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers. perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent.

#### Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### **Patrol Procedures**

10504125.....3 credits

Learners are introduced to effective patrol techniques related to the use of law enforcement electronic equipment. traffic enforcement, and patrol-related techniques. Learners will utilize a mixture of classroom and realistic training exercises while using equipment that is consistent with what actual law enforcement officers use in the field. Prerequisites: Admission to Criminal Justice-Studies program 105045 and Intro to Law Enforcement 10504114

#### **Report Writing for Protective Services** 10504140.....3 credits

Introduces the knowledge necessary to write a variety of law enforcement reports to convey necessary information that is clear, concise, complete and accurate, Learners will participate in scenarios and role playing which will culminate with them completing a police report. Prerequisites: Admission to Criminal Justice-Studies program 105045 and English Composition 10801136

#### Speech 2

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

#### Wellness in Protective Services 10504144 ......3 credits

Introduces the skills and abilities needed to deal constructively with the stress related to a career in criminal justice. Learners will identify their sources of stress, their early warning signs, and healthy coping styles. Course also focuses on time management, relaxation activities, along with exercise and diet planning.

Prerequisite: Admission to Criminal Justice-Studies program 105045



## **CULINARY ARTS**

# Associate in Applied Science (AAS) Program Code: 10-316-1 Total Credits: 60-61

Mid-State's Culinary Arts program prepares students to provide professional chef and related cooking services in restaurants and other commercial food establishments. Instruction includes recipe and menu planning, preparing and cooking of foods, supervising and training kitchen assistants, the management of food supplies and kitchen resources, aesthetics of food presentation, and familiarity with or mastery of a wide variety of cuisines and culinary techniques. Graduates of this program are prepared for entry-level roles in the food service and restaurant industry. You will develop both the technical and interpersonal skills needed for success and learn proper food safety practices. Hands-on activities include opportunities to apply culinary skills and plan menus, plan events, produce sales and marketing projects, draft budgets, practice effective management and customer service, and participate in an industry-related internship.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where:

When:\_\_\_\_\_

With:\_\_\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_

\_\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





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500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

## BEGIN AT ANY POINT IN THE PATHWAY

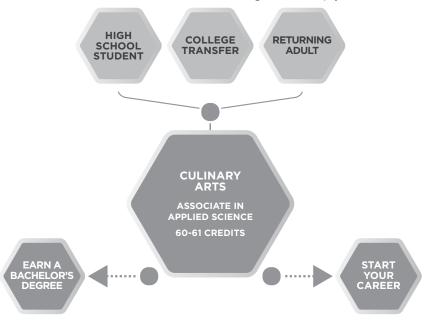
College Credit • Dual Credit Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.

### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

• Hospitality Management



#### **CAREER OPTIONS**

- Head Cook
- Line Cook
- Sous Chef

#### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Culinary Arts graduate, to be able to:

- Apply principles of safety and sanitation in food service operations.
- Apply principles of nutrition.
- · Demonstrate culinary skills.
- Manage food service operations.
- · Plan menus.
- Analyze food service financial information.
- Relate food service operations to sustainability.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers.

#### **TECHNICAL STANDARDS**

Students enrolled in the Culinary Arts program must be able to meet the established technical standards identified below, which are reflective of those found in the profession.

- Ability to move or transport objects up to 50 pounds, potentially with occasional, frequent, or constant exertion.
- Ability to detect and respond to emergencies.
- Sufficient endurance, strength, mobility, balance, flexibility, and coordination to perform activities and emergency procedures.
- Sufficient sensory (auditory, visual, taste, smell, tactile) ability in order to detect temperature and/or environmental temperature, detect freshness or state of product, etc.

#### PROGRAM PROGRESSION

In order to progress in and successfully complete the program, students must repeat core courses (courses numbered 10-316-xxx and 10-109-xxx) not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or pre-requisites.

Please note that the ability to repeat courses is dependent upon availability of courses. Students may be required to apply for program re-entry in order to repeat courses.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### **GPS for Student Success**

an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### **Pre-Algebra**

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

Term	•	redits
10316112 10316125	Sanitation for Foodservice Operations <b>C</b> Introduction to Food Production <b>C</b>	1 3
10316123	Nutrition ©	2
10801136	English Composition 1 🗹	3
10809103	Think Critically & Creatively	3
Term	15-16 c	redits
10316126	Culinary Applications	2
10316128	Introduction to Foodservice	3
10316129	Culinary Internship	2
10316130 10801196	Introduction to Baking Oral/Interpersonal Communication <b>r</b> -or	2
10801196	Speech &	<b>-</b> 3
10804107	College Mathematics 🕝	3
	-or-	
10804189	Introductory Statistics 🗹	3
1000 4110	-or-	
10804118	Intermediate Algebra with Applications ©	<b>4</b>
Term		redits
10109134	Cost Control-Revenue Management	3
10316127	Menu Planning	3
10316132 10316133	Environmental Sustainability Dining Room Customer Service	1
10316133	International Cuisine	2
10316135	American Regional Cuisine	3
10809198	Intro to Psychology 🗹	3
Term		redits
10196191 10316137	Supervision <b>Z</b> Beverage Management	3 1
10316137	Purchasing & Receiving	3
10316138	Garde Manger	3
10316139	Restaurant Operations	4
10809166	Intro to Ethics: Theory & Application 🗹	3
	Total credits	60-61
	iotal credits	00-01

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

#### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10316112 10316125 10801136	Sanitation for Foodservice Operation Introduction to Food Production & English Composition 1 &	7 credits as <b>c</b> 1 3 3
<b>Term</b> 10316128 10316137 10801196 10801198	Introduction to Foodservice Beverage Management Oral/Interpersonal Communication  Speech	7 credits 3 1 7-or-
<b>Term</b> 10316131 10316133 10804107	Nutrition  Dining Room Customer Service College Mathematics  Or-	-7 credits 2 1 3
10804189	Introductory Statistics 🗹	3
10804118	Intermediate Algebra with Application	ons 🗹 4
<b>Term</b> 10316129 10316130 10809103	Culinary Internship Introduction to Baking Think Critically & Creatively	7 credits 2 2 3
<b>Term</b> 10316127 10316132 10316134	Menu Planning Environmental Sustainability International Cuisine	6 credits 3 1 2
<b>Term</b> 10316126 10316138 10809166	Culinary Applications Garde Manger Intro to Ethics: Theory & Application	8 credits 2 3 2 3
<b>Term</b> 10109134 10316135 10809198	Cost Control-Revenue Management American Regional Cuisine Intro to Psychology &	<b>9 credits</b> 3 3 3
<b>Term</b> 10196191 10316136 10316139	Supervision <b>Z</b> Purchasing & Receiving Restaurant Operations	<b>O credits</b> 3 3 4
	Total cred	lits 60-61

### American Regional Cuisine

#### 10316135.....3 credits

This class will take students across the United States, learning dishes such as New England Clam Chowder, Tampa-Style Cuban sandwiches, Louisiana Gumbo, Wisconsin Beer Battered Fish Fry, Texas BBQ Brisket, California Cioppino, and other regional dishes.

Prerequisites: Introduction to Food Production 10316125, Introduction to Foodservice 10316128, and Sanitation for Foodservice Operations 10316112

#### **Beverage Management**

10316137 ......1 credit

Students will be learn to identify types of nonalcoholic beverages and alcoholic drinks. Students will learn to prepare and serve various beverages to meet established standardized recipes. Student will learn about responsible alcohol service by completing the ServSafe Alcohol training program. The ServSafe Alcohol® Training program is developed by the National Restaurant Association and experts who have direct experience with the risks involved in serving alcohol. This connection to the foodservice industry provides insights that help prepare students for difficult situations. Students will take the Responsible Alcohol certification exam at the end of the course.

### College Mathematics &

10804107 ......3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Cost Control-Revenue Management

10109134 .....3 credits

Covers the concepts and techniques of controlling costs with particular emphasis placed on cost-to-sales relationship. Utilizing industry specific technology, students calculate the cost of goods, selling price and relative percentages. They also forecast sales, conduct yield analyses and calculate break-even points.

#### **Culinary Applications**

10316126.....2 credits

Applies the basic principles of culinary calculations involved in the purchase, preparation and use of goods related to the hospitality field.

### **Culinary Internship**

10316129......2 credits

This internship provides students with practical knowledge and experience in the culinary industry through the lens of restaurant cooks and managers. Integrating the theories and techniques learned in previous courses with specific off-campus occupational experiences at selected training sites allows students to gain a real-world perspective of this segment of the industry.

Prerequisites: Admission to Culinary Arts program, Sanitation for Foodservice Operations 10316112 and Introduction to Food Production 10316125

### **Dining Room Customer Service**

10316133.....1 credit

In this course, students will learn about table settings, various styles of dining room service and operations and become familiar with the importance of proper dining room guest service. Students will apply these techniques in the Restaurant Operations course later in the program.

### English Composition 1 2

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### **Environmental Sustainability**

10316132.....1 credit

In this course, students will learn about responsible ingredient sourcing for restaurants including purchasing locally, farm-to-table practices, and sustainable seafood. Other topics include restaurant waste economic and environmental impact and practices for reduction, energy use in restaurants, and communicating a restaurant's environmentally sustainable practices to customers.

#### **Garde Manger**

10316138.....3 credits

In this course, students will learn to prepare cold soups, cold sauces, cheese platters, charcuterie boards, pâtés and terrines, as well as salads and decorative fruit and vegetable displays.

Prerequisites: Introduction to Food Production 10316125, Introduction to Foodservice 10316128, and Sanitation for Foodservice Operations 10316112

## Intermediate Algebra with Applications & 10804118 ...... 4 redits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### **International Cuisine**

#### 10316134.....2 credits

In this course, students will build upon their culinary skills learned in previous course by learning about the culture, ingredients, and culinary history of various regions of the world outside the United States. The course will include Asian, European, Latin, and African cuisines.

Prerequisites: Introduction to Food Production 10316125, Introduction to Foodservice 10316128, and Sanitation for Foodservice Operations 10316112

## Intro to Ethics: Theory & Application © 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Psychology &

#### 10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Introduction to Baking

#### 10316130 .....2 credits

Students will learn baking theory through online and workbook exercises and then apply this theory in class by utilizing the equipment and ingredients used in commercial baking to prepare yeast breads, quick breads, pies, cakes, and cookies and other products. The course will reinforce the knowledge and skills the student has learned in previous courses including practical kitchen safety & sanitation, mise en place, product identification, and scaling & product utilization. Prerequisites: Introduction to Food Production 10316125 and Sanitation for Foodservice Operations 10316112 or ServSafe® Food Manager Certification

#### Introduction to Foodservice

#### 10316128.....3 credits

In this course, students will practice the skills they learned in the Introduction to Food Production class by operating a noncommercial foodservice outlet serving guests through a la minute and batch cooking practices. Heavy emphasis is placed on safety & sanitation, knife skills and culinary theory. Prerequisites: Sanitation for Foodservice Operations 10316112 and Introduction to Food Production 10316125

### Introduction to Food Production 🗷

10316125.....3 credits

Introduces quantity food production to the non-culinary student. Topics include the preparation of a variety of menu items, equipment use, cooking methods and terminologies, recipe conversion and the essentials of timing and coordination of service.

Prerequisite: Sanitation for Food Service Operations 10316112

## Introductory Statistics ©

10804189 ......3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 834109 with a grade of "C" or better or College Math 804107 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### **Menu Planning**

10316127.....3 credits

A hands-on approach to planning, creating, and maintaining effective menus. Discussions include menu items and placement, food costing and creative menu designs for visual appeal. Menu planning and design software may be utilized.

#### Nutrition

10316131 ......2 credits

This course covers key concepts in nutrition including nutrition basics, nutritional standards and guidelines, nutrition programs, market and menu assessment, cooking for health, allergens and special diets, and menu labeling regulations. As part of the course, students will complete a field project and have the opportunity to earn a ManageFirst® Certificate in Nutrition.

## Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Purchasing & Receiving**

10316136.....3 credits

In this course, students will learn how to prepare vendor orders using product requisitions from kitchen classes, enter orders online using vendor website, receive products in a safe and secure manner, organize refrigerated, frozen and dry cooler spaces to ensure food safety and anti-theft standards are met, conduct and extend a product inventory and produce, update and maintain food receiving and storage logs utilizing a modified HACCP system to document food safety practices.

Prerequisite: Sanitation for Foodservice Operations 10316112 or ServSafe® Food Manager Certification

#### **Restaurant Operations**

10316139...... 4 credits

Restaurant Operations students will complete product preparation sheets using standardized recipes and restaurant reservations. Students will set up a kitchen for service, including equipment, supplies, and mise en place and prepare menu items to order or buffet style as required. Students will take guest reservations, greet and serve guests, and utilize a point of sale system for order entry and guest check reconciliation.

Prerequisite: Sanitation for Foodservice Operations 10316112 Corequisite: Purchasing & Receiving 10316136

## Sanitation for Foodservice Operations 2 10316112 ......1 credit

Students examine the causes of food-borne illness and apply techniques for preparing, storing, and serving hot and cold foods from a ServSafe® Certified Instructor/ Proctor. Students also examine the role of management and workers related to sanitation regulations and standards. The ServSafe® certification test is administered in this course and students will need to hold this valid certificate for graduation and employment in the culinary industry.

#### Speech 2

10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Supervision 🗹

10196191 .....3 credits

Applies skills and tools necessary to perform the functions of a contemporary frontline leader. Students engage in operational planning, analyze organizational structures, review the staffing process, employ techniques to enhance employee personal and group effectiveness, and develop control techniques to measure effectiveness in the above areas.

## Think Critically & Creatively

10809103 .....3 credits

Provides instruction in the vital, realistic, and practical methods of thinking that are in high demand in all occupations of substance today. Provides in-depth consideration of decision making, problem solving, detailed analysis of ideas, troubleshooting, argumentation, persuasion, creativity, setting goals and objectives, and more. Students apply specific thinking strategies and tools to situations in a wide variety of workplace, personal, academic, and cultural situations. Classroom instruction is based on demonstration, discussion, projects, and teamwork. Assignments range from the short and simple to the detailed and complex. Focuses on reality and practicality throughout.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.



## **CUSTOMER RELATIONSHIP PROFESSIONAL**

**Technical Diploma** 

Program Code: 30-106-8

**Total Credits: 12** 

The only program of its kind in the Wisconsin Technical College System, Mid-State's Customer Relationship Professional program develops students into important members of a call center or customer service team. The program focuses on communicating with customers to help them navigate past challenges to fulfill their needs, emphasizing active listening, effective verbal communication, and customer service skills. Through hands-on projects, you will learn telephone etiquette, how to respond appropriately to customers, and how to perform quick problem-solving analysis while exceeding customer expectations.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





**ADAMS CAMPUS** 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive

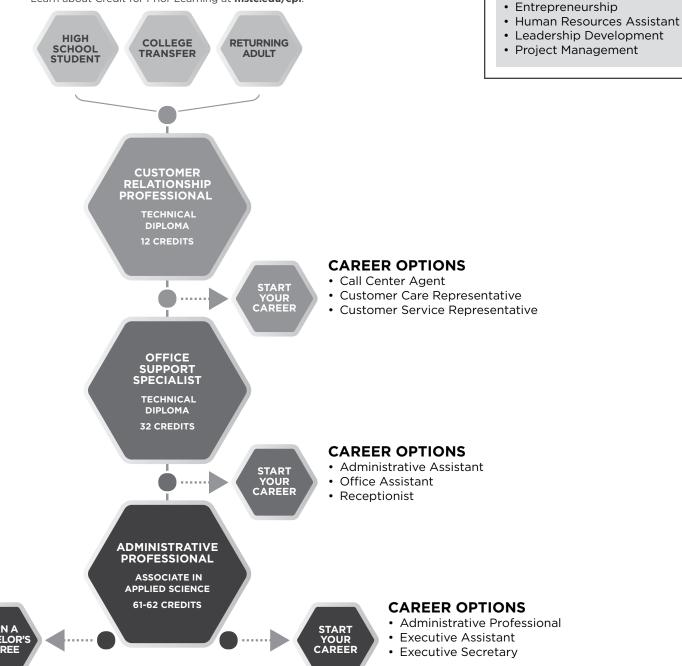
WISCONSIN RAPIDS CAMPUS 500 32nd Street North

Stevens Point, WI 54481 Wisconsin Rapids, WI 54494

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

OTHER OPTIONS

**RELATED PROGRAMS** 

• Business Management

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Customer Relationship Professional graduate, to be able to:

- Demonstrate effective workplace communications.
- Model professionalism in the workplace.
- Maintain internal and external relationships.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Customer Relationship Professional program outcomes are measured in the TSA-designated course Quality Customer Service.

NOTES:	

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 .....2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### **Pre-Algebra**

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10103106 10106106 10801136 10809172	Microsoft Office-Introduction*   Quality Customer Service* English Composition 1*   Introduction to Diversity Studies*	12 credits
	Total	credits 12

- \* This course may also be offered in a different term including during winterim or summer terms, with 3-week, 8-week, or 16-week sessions available. A variety of modalities and class lengths may be available, including online, hybrid, TelePresence, or face to face.
- This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- · This program can be completed entirely online.
- Students complete a full-time course load over a 16-week term.
   This term may include a combination of classes taken in an 8-week session and classes taken over the full 16-week term.
- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

#### SAMPLE PART-TIME CURRICULUM OPTION

Term		6 credits
10103106	Microsoft Office-Introduction* <b>☞</b>	3
10809172	Introduction to Diversity Studies* 🗹	3
Term		6 credits
10106106	Quality Customer Service*	3
10801136	English Composition 1*	3
	Total	credits 12

## **COURSE DESCRIPTIONS**

## English Composition 1 2 10801136 ......3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

## Introduction to Diversity Studies 2 10809172......3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Microsoft Office-Introduction 10103106 ......3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

## Quality Customer Service 10106106......3 credits

Addresses sensitivity in communicating with customers and co-workers. Includes international communications, teamwork, working relationships, and telephone skills.



## **DIESEL & HEAVY EQUIPMENT TECHNICIAN**

**Technical Diploma** 

Program Code: 32-412-1

**Total Credits: 58** 

Graduates of Mid-State's Diesel & Heavy Equipment Technician program have the knowledge and skills to confidently locate and repair mechanical and electrical problems in trucks, buses, construction equipment, farm equipment, and industrial machinery. Through hands-on classroom learning and training on state-of-the-art equipment, you will learn to perform preventive maintenance and troubleshooting procedures, rebuild components, and respond to field service calls. You'll also participate in field trips, tours, and equipment demonstrations, and you'll get real-world experience by maintaining Mid-State's vehicle fleet and operating onsite equipment.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu

888.575.6782 f in y TTY: 711

MID-STATE

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MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481

WISCONSIN RAPIDS CAMPUS 500 32nd Street North

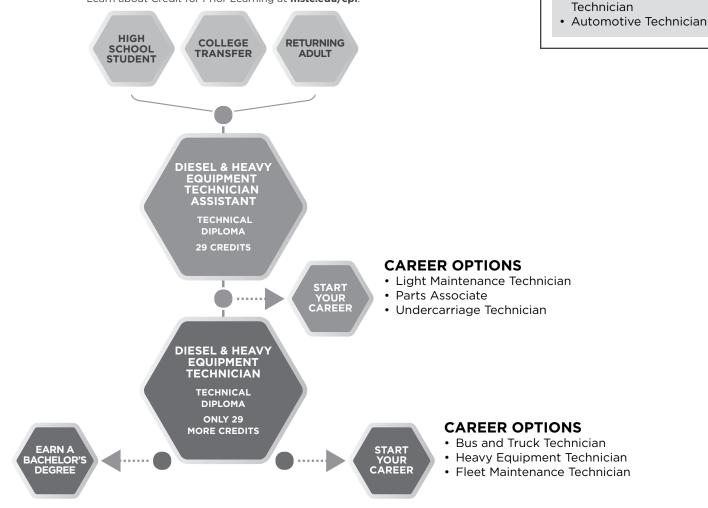
Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

**OTHER OPTIONS** 

**RELATED PROGRAMS** 

• Automotive Maintenance

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Diesel & Heavy Equipment Technician graduate, to be able to:

- Diagnose major systems in the diesel and heavy equipment industry.
- Repair major systems in the diesel and heavy equipment industry.
- Service major systems in the diesel and heavy equipment industry.
- Practice personal and professional work habits.
- Document complaint, cause, and correction.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Capstone-Live Diesel Repair course.

#### PROTECTIVE CLOTHING

Students are required to wear school uniform shirts while working in the diesel shop. Uniform shirts can be purchased from the Wisconsin Rapids campus Bookstore. Students are also required to provide and wear leather work shoes with oil-resistant soles.

NOTES:		
		_

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success &

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### SAMPLE FULL-TIME CURRICULUM OPTION

Term 10457119 31442320 31442321 32412375 32412340 32412308 32412309	Fabrication Fundamentals 1 & Welding Foundations 1 & Welding Foundations 2 & Service Practices in Diesel Industry & Intro to Electricity for the Diesel Industry & Braking Systems-Diesel Suspension & Steering Systems	1 1 1 1 1 5 5
Term	14 credi	its
31801368 32462302 32412305 32412312 32412313	Workplace Communication Mobile Hydraulics  Preventive Maintenance-Diesel Drivetrains Electrical Systems	1 2 3 4 4
<b>Term</b> 31804305 32412303 32412324 32412327	Applied Mathematics & Heating/AC-Diesel & Engine Repair Fuel Systems & Alternative Fuels	2 3 5 5
<b>Term</b> 32412310 32412311 32412330 32806351	Engine Performance & Emissions-Diesel Advanced Electricity-Diesel Capstone-Live Diesel Repair Applied Science	5 5 2 2
	Total credits !	58

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

**NOTES:** 

#### SAMPLE PART-TIME CURRICULUM OPTION **Term** 11 credit 32412308 Braking Systems-Diesel 5 32412309 Suspension & Steering Systems 5 32412340 Intro to Electricity for the Diesel Industry & 12 credits **Term** 32412305 Preventive Maintenance-Diesel 3 32412313 **Electrical Systems** 4 32412324 **Engine Repair** 5 7 credits Term 10457119 Fabrication Fundamentals 1 🗷 10457120 Fabrication Fundamentals 2 1 31442320 Welding Foundations 1 🗹 1 31442321 Welding Foundations 2 2 1 31804305 Applied Mathematics & 2 32412375 Service Practices in Diesel Industry 2 **Term** 10 credits 31801368 Workplace Communication 32412303 Heating/AC-Diesel 3 32412312 **Drivetrains** 4 32806351 Applied Science 2 7 credits **Term**

32412327 Fuel Systems & Alternative Fuels

32412330 Capstone-Live Diesel Repair

Advanced Electricity-Diesel

Engine Performance & Emissions-Diesel

32462302 Mobile Hydraulics &

**Term** 

32412310

32412311

5

2

5

5

2

12 credits

**Total credits 58** 

## Advanced Electricity-Diesel

32412311 .....5 credits

Learner receives advanced training in the theory, operating principles, and diagnosis and repair of vehicle electronic/electrical systems. Emphasis on diagnosis and repair of vehicle ignition, starting, charging, lighting, and electronic powertrain systems as related to the transportation, agriculture, and heavy equipment industry.

Prerequisites: Admission to Diesel & Heavy Equipment Technician

Prerequisites: Admission to Diesel & Heavy Equipment Technician program 324121, Engine Repair 32412324, and Fuel Systems & Alternative Fuels 32412327

## Applied Mathematics 🗹

31804305.....2 credits

Students taking Applied Math I make and convert various measurements. Students use formulas to solve problems. They compute dimensions of geometric shapes. Students use statistical tools to represent and analyze data. They analyze various financial situations. Students use basic right triangle trigonometry to solve problems. In each topic area, students solve application problems.

#### **Applied Science**

32806351 ......2 credits

This survey course in basic physics is designed for students in the Automotive Technician, Diesel & Heavy Equipment Technician, and Precision Machining Technician programs. Topics have been specially selected to provide students with basic support material for principles applied in the above listed programs. Topics to be covered include basic measurement skills; problem solving; motion; forces and energy transfer in linear and rotary systems; properties of solids, liquids and gases; temperature and heat; and basic DC electricity.

## **Braking Systems-Diesel**

32412308 .....5 credits

Learners employ fundamentals of vehicle braking systems, including drum, disc, hydraulic, and air systems to perform on vehicle diagnosis and repairs. Includes power and anti-skid systems, with emphasis on troubleshooting and component replacement.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122

## **Capstone-Live Diesel Repair**

32412330 ......2 credits

Learners have the opportunity to work on "live" diagnostic and repair projects and have their knowledge and skills assessed across a wide spectrum of projects provided by business and industry. Work orders, troubleshooting, parts ordering, installation, and quality checks are all elements included to provide real-life experiences as students prepare to begin their diesel and heavy equipment career. Prerequisites: Engine Repair 32412324 and Fuel Systems & Alternative Fuels 32412327; Corequisites: Engine Performance &

Emissions-Diesel 32412310 and Advanced Electricity-Diesel 32412311

#### **Drivetrains**

32412312 ...... 4 credits

Learners practice on-vehicle diagnosis and repair of clutches, manual transmissions, drive shafts and universal joints, and drive axles. Provides general overview of the most common transmissions and drive train components used in industry. The diagnostic and service procedures studied apply to the truck, construction, and heavy equipment industries.

Prerequisites: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel and Heavy Equipment Technician Assistant program 314122, Suspension & Steering Systems 32412309, and Braking Systems-Diesel 32412308

## **Electrical Systems**

32412313 ...... 4 credits

Learners employ principles of construction, function, and operation of batteries, starting systems, charging systems, and controls. Incorporates basic electronics, including series and parallel circuits, magnetism and Ohm's Law, wiring schematics, soldering techniques, and use of diagnostic equipment.

Prerequisites: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122 and Intro to Electricity for the Diesel Industry 32412340

## Engine Performance & Emissions-Diesel 32412310 ......5 credits

Learners employ principles of construction, function, and operation of ignition systems, fuel systems, air induction systems, exhaust systems, emission control systems. Emphasizes the proper diagnosis, repair, and tune-up of system components as related to the transportation, agriculture, and heavy equipment industry.

Prerequisites: Admission to Diesel and Heavy Equipment Technician program 324121, Engine Repair 32412324, and Fuel Systems & Alternative Fuels 32412327

### **Engine Repair**

32412324.....5 credits

Learners disassemble, measure, and inspect all mechanical components of a diesel engine. This course emphasizes the diagnosis and repair of cylinder heads, valve train, cylinder Components, engine blocks, and related hardware. Also covers engine support systems, such as lubrication and cooling.

Prerequisites: Admission to Diesel & Heavy Equipment Technician program 324121 and Preventive Maintenance-Diesel

#### Fabrication Fundamentals 1 2 10457119.....1 credit

An introduction to structural shapes and sheet metal fabrication. Presents fabrication techniques, metal selection, and layout, cutting, bending, drilling, threading, and joining using manual equipment and techniques. Information is presented to the student and followed up with lab activities to provide a hands-on experience. Emphasizes developing an understanding of the tools, techniques, safe work habits, and application of sheet metal fabrication skills.

#### **Fuel Systems & Alternative Fuels** 32412327.....5 credits

Learners employ principles of construction, function, and operation of low pressure fuel systems, governors, mechanical distributor pumps, multiple plunger pumps, electronic unit injectors, hydraulic actuated electronic unit injectors, and common rail fuel systems. This course emphasizes diagnosis and repair of mechanical, hydraulic, and common rail fuel systems.

Prerequisites: Admission to Diesel & Heavy Equipment Technician program 324121; Preventive Maintenance-Diesel 32412305

#### Heating/AC-Diesel & 32412303 .....3 credits

Introduces the learner to the theory and operation of the heating and air conditioning systems found in transportation, farm, and heavy equipment industries. Focuses on the inspection, diagnoses, and repair of heating and air conditioning systems found in the diesel field. Learners have the opportunity to acquire their EPA 608 and 609 Certification. Offers experience in installation, operation, and repair of auxiliary power units along with refrigeration units.

Prerequisites: Admission to Diesel & Heavy Equipment Technician program 324121 and completion of Diesel & Heavy Equipment Technician Assistant program 314122

#### Intro to Electricity for the Diesel Industry & 32412340 ......1 credit

Introduces learners to electrical measurement tools and techniques. Includes both hands-on experience and theory on topics including multimeter operation, Ohm's law, wiring diagram interpretation, and circuit testing. Content is focused on tools and procedures commonly used in automotive, and diesel/heavy equipment industries. Learners will have the opportunity to earn NC3 multimeter certification during this course.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122

### Mobile Hydraulics **☑**

32462302 .....2 credits

Learners employ basic principles and application of pumps, compressors, motors, valves, actuators, and conductors to demonstrate the understanding of hydraulic systems as well as the physical properties of liquids. Learners will identify various parts of a circuit in order to perform light maintenance and troubleshooting in hydraulic systems used on heavy truck, earth-moving, or agricultural equipment. Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122

### **Preventive Maintenance-Diesel**

32412305 .....3 credits

Introduces learner to vehicle preventive maintenance and inspection. Focuses on maintaining and inspecting the engine system, cab, electrical and electronics, and frame and chassis components with an emphasis on DOT inspections. Learners practice proper service on vehicle systems and perform a visual inspection of all vehicle components. Learners also practice how to properly document all maintenance and inspection findings.

Prerequisites: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122 and Suspension & Steering Systems 32412309; Braking Systems-Diesel 32412308

#### Service Practices in Diesel Industry & 32412375.....1 credit

Introduces the learner to common tools, terminology, and service practices in the transportation field. Covers safety, environmental concerns, and basic customer relations. Service shop management practices and the use of automated work order, parts ordering, and time management concepts are included.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122

## **Suspension & Steering Systems**

32412309 .....5 credits

Analyze the construction and working principles of chassis components to perform on vehicle repairs. Includes instruction on frames, suspension systems, steering gears and linkages, wheels and tires, and wheel alignment. Learners practice on-vehicle diagnosis and repair of suspension and steering systems.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122

## Welding Foundations 1 ☑

31442320 ......1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of SMAW, GMAW, and OXY-Fuel cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

### Welding Foundations 2 🗷

31442321.....1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of GTAW, FCAW and Plasma cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

#### **Workplace Communication**

31801368 ......1 credit

Analyze workplace communication situations to develop professional verbal and written communication skills. Learners apply verbal and written communication skills, as well as conflict resolution strategies, to improve workplace communication climates and promote personal and professional growth.



## **DIESEL & HEAVY EQUIPMENT TECHNICIAN ASSISTANT**

**Technical Diploma** 

Program Code: 31-412-2

**Total Credits: 29** 

Mid-State's Diesel & Heavy Equipment Technician Assistant program provides students with the knowledge and technical skills needed to perform basic maintenance and light repairs in the following areas: brakes, hydraulics, suspension and steering, drive train, tire service, basic electricity, and preventive maintenance inspection. This one-year option is ideal for students looking to work in a fleet environment. Through hands-on classroom learning and training on state-of-the-art equipment, you will learn to perform preventive maintenance, inspection, and light repairs. You'll also participate in field trips, tours, and equipment demonstrations, and you'll get real-world experience by maintaining Mid-State's vehicle fleet and operating onsite equipment.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711



MID-STATE

**ADAMS CAMPUS** 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481

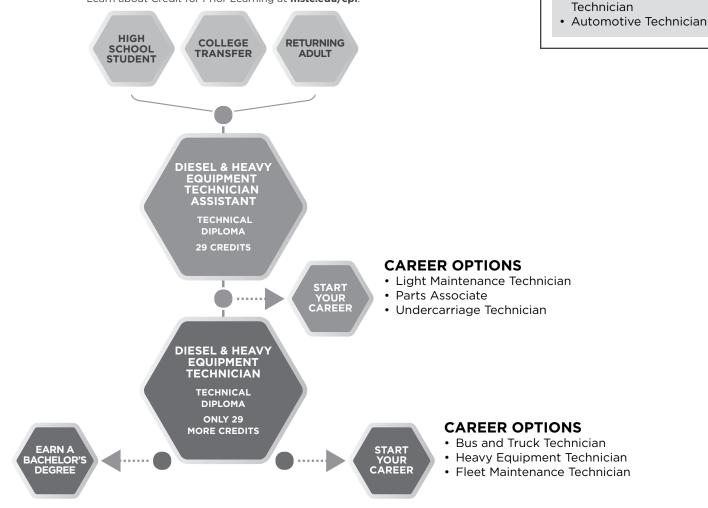
WISCONSIN RAPIDS CAMPUS 500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

**OTHER OPTIONS** 

**RELATED PROGRAMS** 

• Automotive Maintenance

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Diesel & Heavy Equipment Technician Assistant graduate, to be able to:

- Practice personal and professional work habits.
- Perform basic maintenance for the diesel and heavy equipment industry.
- Perform light repairs for the diesel and heavy equipment industry.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting through the Braking, Steering & Suspension, and Electrical ASE tests.

#### PROTECTIVE CLOTHING

Students are required to wear school uniform shirts while working in the diesel shop. Uniform shirts can be purchased from the Wisconsin Rapids campus Bookstore. Students are also required to provide and wear leather work shoes with oil-resistant soles.

NOTES:		

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success &

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

#### **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### SAMPLE FULL-TIME CURRICULUM OPTION

Term 10457119 31442320 31442321 32412375 32412340 32412308 32412309	Fabrication Fundamentals 1 & Welding Foundations 1 & Welding Foundations 2 & Service Practices in Diesel Industry & Intro to Electricity for the Diesel Industry & Braking Systems-Diesel Suspension & Steering Systems	its
<b>Term</b> 31801368 32462302 32412305 32412312 32412313	Workplace Communication Mobile Hydraulics  Preventive Maintenance-Diesel Drivetrains Electrical Systems  Total credits	1 2 3 4 4

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

#### **SAMPLE PART-TIME CURRICULUM OPTION**

<b>Term</b> 10457119 31442320 31442321 32412309 32412375	Fabrication Fundamentals 1 2 Welding Foundations 1 2 Welding Foundations 2 2 Suspension & Steering Systems Service Practices in Diesel Industry 2	9 credits 1 1 1 5 1
<b>Term</b> 32412308 32412340	Braking Systems-Diesel Intro to Electricity for the Diesel Indu	6 credits 5 ustry 🕝 1
<b>Term</b> 31801368 32462302 32412312	Workplace Communication Mobile Hydraulics & Drivetrains	7 credits 1 2 4
<b>Term</b> 32412305 32412313	Preventive Maintenance-Diesel Electrical Systems	7 credits 3 4 credits 29

## **COURSE DESCRIPTIONS**

## Braking Systems-Diesel

32412308 .....5 credits

Learners employ fundamentals of vehicle braking systems, including drum, disc, hydraulic, and air systems to perform on vehicle diagnosis and repairs. Includes power and anti-skid systems, with emphasis on troubleshooting and component replacement.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122

#### **Drivetrains**

32412312 ..... 4 credits

Learners practice on-vehicle diagnosis and repair of clutches, manual transmissions, drive shafts and universal joints, and drive axles. Provides general overview of the most common transmissions and drive train components used in industry. The diagnostic and service procedures studied apply to the truck, construction, and heavy equipment industries.

Prerequisites: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel and Heavy Equipment Technician Assistant program 314122, Suspension & Steering Systems 32412309, and Braking Systems-Diesel 32412308

### Electrical Systems

32412313 ...... 4 credits

Learners employ principles of construction, function, and operation of batteries, starting systems, charging systems, and controls. Incorporates basic electronics, including series and parallel circuits, magnetism and Ohm's Law, wiring schematics, soldering techniques, and use of diagnostic equipment.

Prerequisites: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122 and Intro to Electricity for the Diesel Industry 32412340

## Fabrication Fundamentals 1 &

10457119.....1 credit

An introduction to structural shapes and sheet metal fabrication. Presents fabrication techniques, metal selection, and layout, cutting, bending, drilling, threading, and joining using manual equipment and techniques. Information is presented to the student and followed up with lab activities to provide a hands-on experience. Emphasizes developing an understanding of the tools, techniques, safe work habits, and application of sheet metal fabrication skills.

#### Intro to Electricity for the Diesel Industry & 32412340 .....1 credit

Introduces learners to electrical measurement tools and techniques. Includes both hands-on experience and theory on topics including multimeter operation, Ohm's law, wiring diagram interpretation, and circuit testing. Content is focused on tools and procedures commonly used in automotive, and diesel/heavy equipment industries. Learners will have the opportunity to earn NC3 multimeter certification during this course.

Prerequisite: Admission to Diesel and Heavy Equipment Technician program 324121 or Diesel and Heavy Equipment Technician Assistant program 314122

## **Mobile Hydraulics**

32462302 ......2 credits

Learners employ basic principles and application of pumps, compressors, motors, valves, actuators, and conductors to demonstrate the understanding of hydraulic systems as well as the physical properties of liquids. Learners will identify various parts of a circuit in order to perform light maintenance and troubleshooting in hydraulic systems used on heavy truck, earth-moving, or agricultural equipment. Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122

## **Preventive Maintenance-Diesel**

32412305 .....3 credits

Introduces learner to vehicle preventive maintenance and inspection. Focuses on maintaining and inspecting the engine system, cab, electrical and electronics, and frame and chassis components with an emphasis on DOT inspections. Learners practice proper service on vehicle systems and perform a visual inspection of all vehicle components. Learners also practice how to properly document all maintenance and inspection findings.

Prerequisites: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122 and Suspension & Steering Systems 32412309; Braking Systems-Diesel 32412308

#### Service Practices in Diesel Industry & 32412375.....1 credit

Introduces the learner to common tools, terminology, and service practices in the transportation field. Covers safety, environmental concerns, and basic customer relations. Service shop management practices and the use of automated work order, parts ordering, and time management concepts are included.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122

### **Suspension & Steering Systems**

32412309 .....5 credits

Analyze the construction and working principles of chassis components to perform on vehicle repairs. Includes instruction on frames, suspension systems, steering gears and linkages, wheels and tires, and wheel alignment. Learners practice on-vehicle diagnosis and repair of suspension and steering systems.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 or Diesel & Heavy Equipment Technician Assistant program 314122

#### Welding Foundations 1 2 31442320 ......1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of SMAW, GMAW, and OXY-Fuel cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

### Welding Foundations 2 2

31442321.....1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of GTAW, FCAW and Plasma cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

#### **Workplace Communication** 31801368......1 credit

Analyze workplace communication situations to develop professional verbal and written communication skills. Learners apply verbal and written communication skills, as well as conflict resolution strategies, to improve workplace communication climates and promote personal and professional growth.



## **DIGITAL MARKETING**

Associate in Applied Science (AAS) Program Code: 10-104-8 **Total Credits: 63-64** 

Mid-State's Digital Marketing program builds the skills, experience, and connections critical to business success. Our graduates can confidently create inventive promotional campaigns, develop and implement graphic and video content, construct a dynamic social media presence, create an Internet marketing strategy, and analyze data essential for making effective business decisions. In this program you'll develop and polish your presentation skills to enable you to work in a multitude of industries. And you'll learn all of this from industry experts while using emerging technology and hands-on tools.

Courses are transferable to bachelor's degree programs through a

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

variety of transfer agreements.

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With: Official Transcripts

- Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





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MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS

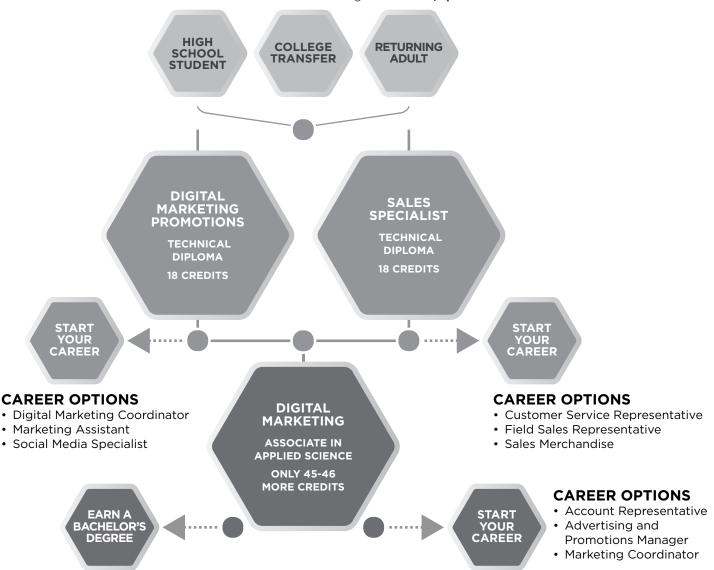
1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS

500 32nd Street North Wisconsin Rapids, WI 54494

## BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Digital Marketing graduate, to be able to:

- Develop digital marketing strategies to anticipate and satisfy market needs.
- Create digital marketing content for products, services, images, and ideas.
- Integrate tools and technology for digital marketing initiatives.
- Analyze the effectiveness of marketing outcomes.
- Promote products, services, images, and/or ideas to achieve a desired outcome.
- Evaluate information through the market research process to make business decisions.
- · Prepare selling strategies.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Marketing program outcomes are measured in the TSA-designated course Marketing Management.

#### PROGRAM PROGRESSION

In order to maintain a passing status and progress in the program, students must:

 Receive a grade of "C" or better in Marketing Management.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success ☐ 10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

### Intro to College Writing

required program courses. This course is tuition bearing and

under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10102101 10103106 10104102 10104108 10801136	Intro to Business & Microsoft Office-Introduction & Marketing Principles & Adobe Visual Design English Composition 1 &	dits 3 3 3 3 3		
Term	16-17 cre	dits		
10103124 10104105 10104107 10104109 10104121	Excel-Intermediate  Professional Selling  Social Media Marketing Adobe Video Design Fundamentals of Marketing	1 3 3 3		
10804107	Communications <b>C</b> College Mathematics <b>C</b> -or-	3		
10804118	Intermediate Algebra with Applications 2 -or-	4		
10804189	Introductory Statistics 🗹	3		
Term	16 cre	dits		
10101140 10102121	Accounting 1 <b>c</b> - <b>or</b> - Finance and Budgeting <b>c</b>	3		
10104125	Promotion Management	4		
10104174	Marketing Research	3		
10104180 10801196	Internet and Mobile Marketing Oral/Interpersonal Communication & -or-	3		
10801198	Speech &	3		
Term	16 cre	dits		
10152187	Web Site Development for Business	3		
10104160	Marketing Management	4		
10809122	Intro to American Government <b>&amp; -or-</b> Introduction to Diversity Studies <b>&amp; -or-</b>			
10809196	Intro to Sociology &	3		
10809188	Developmental Psychology 🗹 -or-			
10809198	Intro to Psychology 🗹	3		
10809195	Economics &	3		
Total credits 63-64				

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

### **SAMPLE PART-TIME CURRICULUM OPTION**

<b>Term</b> 10103106 10104102	6 cre Microsoft Office-Introduction & Marketing Principles &	edits 3 3		
<b>Term</b> 10102101 10104105 10804107	9-10 cre Intro to Business & Professional Selling & College Mathematics &	3 3 3		
10804118	-or- Intermediate Algebra with Applications & -or-	4		
10804189	Introductory Statistics &	3		
<b>Term</b> 10103124 10104108 10801136	7 cre Excel-Intermediate & Adobe Visual Design English Composition 1 &	2 dits 1 3 3		
<b>Term</b> 10104107 10104109 10104121	Social Media Marketing Adobe Video Design Fundamentals of Marketing Communications	3 3 3		
<b>Term</b> 10104125 10801196 10801198	7 cree Promotion Management Oral/Interpersonal Communication & -or- Speech &	edits 4 3		
<b>Term</b> 10101140 10102121 10152187 10809188 10809198	Accounting 1 2 Finance and Budgeting 2 Web Site Development for Business Developmental Psychology 2 - or-Intro to Psychology 2	edits -or- 3 3		
<b>Term</b> 10104174 10104180 10809122 10809172 10809196	Marketing Research Internet and Mobile Marketing Intro to American Government & -or- Introduction to Diversity Studies & -or- Intro to Sociology &	3 3 3		
<b>Term</b> 10104160 10809195	7 cre Marketing Management Economics &	edits 4 3		
Total credits 63-64				

### Accounting 1 🗹

#### 10101140.....3 credits

A beginning course designed especially for majors or those who need a strong foundation in accounting principles. Develops the accounting cycle of journaling, posting, adjusting, closing, and reporting. Also emphasizes service and merchandising sole proprietorships in developing the accounting cycle. Explores issues for accounting for cash, accounts and notes receivable, inventories, and fixed assets.

## Adobe Video Design

10104109.....3 credits

This course develops marketing communication skills in digital video production. Topics include collaboration, design, video production, and audio production using Adobe Premier. Learners will develop skills in storytelling, capturing and editing video and audio, and finalizing content for use in social media, web, and other marketing mediums. The design role of the marketer will be discussed throughout the class. Learners should possess basic keyboarding, mouse, and computer skills and should be familiar with Microsoft Windows.

## Adobe Visual Design

10104108.....3 credits

Provides a project-based, marketing-focused exploration of key Adobe graphic design products to include Photoshop, InDesign, and Illustrator. Students are instructed on document setup, creation techniques, and file formats for both digital and print media required for marketing communications. An introduction to the application of imagery, typography, and color management will also be included. The design role of the marketer will be discussed throughout the class. Learners should possess basic keyboarding, mouse, and computer skills and should be familiar with Microsoft Windows.

## College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Developmental Psychology 2

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Economics 2

10809195 .....3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## English Composition 1 &

10801136 ......3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

### **Excel-Intermediate ☑**

10103124 .....1 credit

Students learn to summarize and analyze large data sets. Some of Excel's data tools and what-if tools are applied. Prerequisite: Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123

## Finance and Budgeting ©

10102121 ......3 credits

For the nonfinancial manager, this course introduces the language of accounting, finance, and budgeting. Provides an overview of the use and analysis of financial statements. Business planning and the foundations and development of budgets are explored. Business financing basics and the securing of necessary financing for a business are covered. Practical application of financial statement creation and analysis, budgetary activities, and finance calculations are included.

## Fundamentals of Marketing Communications 2 10104121......3 credits

This course prepares the learner to create and manage a wide range of internal and external organizational communications. Learners will be instructed on the interpersonal communication techniques required for success as a marketing professional. Topics will include preparing professionally written content, effectively using verbal and non-verbal communication in a business setting, developing a professional appearance and polish, presentation techniques for the creation and delivery of complex marketing materials, writing press releases, managing crises, and speaking with the media.

## Intermediate Algebra with Applications © 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Internet and Mobile Marketing 10104180.....3 credits

Introduces the fundamentals and methodologies for developing effective, Internet-based, digital marketing strategies. Specific areas of focus include search engine marketing (SEM) and optimization (SEO), pay-per-click (PPC), website analytics, webpage and content optimization, and best practices for online advertising and email marketing. Additionally, mobile marketing topics such as developing a mobile strategy, planning a mobile web presence, and the effective use of mobile apps and tactics are explored.

## Intro to American Government & 10809122.....3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Intro to Business 🗹

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership

and the processes used in production and marketing, finance, personnel, and management in business operations.

## Intro to Psychology ☑

10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Sociology &

10809196 ......3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Introduction to Diversity Studies & 10809172......3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Introductory Statistics 🗹

10804189 .....3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course. *Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT* 

of 19 or Pre-Algebra 834109 with a grade of "C" or better or College Math 804107 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Marketing Management**

10104160...... 4 credits

Examines the marketing function from the manager's perspective. Topics include management functions, decision making in regard to the customer, product planning, pricing strategies, evaluation of distribution channels, and promotional tactics.

Prerequisites: Marketing Principles 10104102, Adobe Visual Design 10104108, Adobe Video Design 10104109, Professional Selling 10104105, Social Media Marketing 10104107, Fundamentals of Marketing Communications 10104121

### Marketing Principles &

10104102 ......3 credits

This course serves as an introduction to the fundamental marketing concepts used to apply marketing strategies to product development, distribution, pricing, and promotion of goods and services.

#### **Marketing Research**

10104174 ......3 credits

Introduces techniques of research and research reporting. The study of market behavior is pursued as students undertake a marketing focused research project. Prerequisite: Marketing Principles 10104102

## Microsoft Office-Introduction &

10103106 ......3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

#### Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Professional Selling &

10104105.....3 credits

This course will prepare the student to formulate and facilitate sales presentations using fundamental principles, concepts, and theories of business and consumer selling. An emphasis is given to developing the selling process which includes prospecting and qualifying, planning and pre-approaching, approaching the customer, the sales presentation/demonstration, handling objections, closing the sale and post-sale service and follow-up. Additionally, sales careers and the benefits of personal selling will be explored.

### **Promotion Management**

10104125 ...... 4 credits

Focuses on the theory and practice of integrated marketing communications in order to develop content strategies and marketing campaigns. The fundamentals of multichannel promotions as related to target audiences and the marketing mix are studied. The characteristics of major media alternatives including radio, television, newspapers. magazines, outdoor, direct response, and digital media are also explored. Finally, target market research, campaign planning, and creative approaches to messaging are practiced within a project-based learning environment. Prerequisite: Marketing Principles 10104102

### **Social Media Marketing**

10104107 ......3 credits

Addresses how social media has transformed marketing communications from traditional mass media to individualized marketing. Using a variety of social media tools and platforms, this class explores the different methodologies for social media marketing. Topics include creating social media, integrating social media as part of a marketing campaign, the concept of viral marketing, measuring social media success through analytics, and how organizations and individuals have successfully applied this form of marketing.

#### Speech 2 10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### **Web Site Development for Business** 10152187 ......3 credits

This course introduces the student to basic web design using Hypertext Markup language (HTML) as well as web development software tools. Learners will create a personal web site using HTML tags and cascading style sheets. Using web development software, students will create a commercial web site using design elements and techniques for customer relationship building. Learners should possess basic keyboarding, mouse, and computer skills and should be familiar with Microsoft Windows.



# DIGITAL MARKETING PROMOTIONS

Technical Diploma

Program Code: 30-104-8

**Total Credits: 18** 

The Digital Marketing Promotions technical diploma prepares students to communicate with customers with an emphasis on the use of technology and digital media. Graduates are able to use graphic design and video editing software to create a variety of promotional materials to be used by traditional or online businesses. Courses are taught using hands-on projects that create marketing content using Adobe Photoshop, Illustrator, and InDesign for visual design. You'll also use Adobe Premiere to design and create videos. Finally, an emphasis is placed on planning and developing social media content, learning best practices for email marketing, implementing a variety of techniques for effective search engine marketing (SEM), and the use of analytics for better decision making.

Estimated tuition and fees: mstc.edu/programcosts

# **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

# **CHECKLIST:**

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_

\_\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





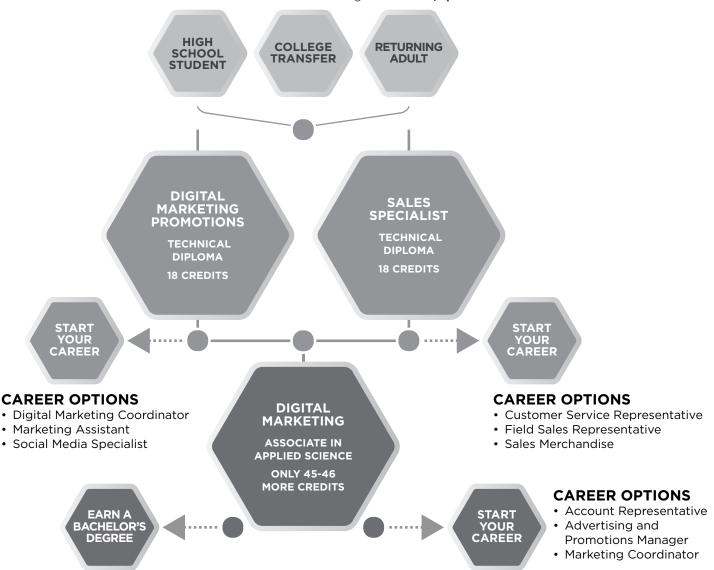
**ADAMS CAMPUS** 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

500 32nd Street North Wisconsin Rapids, WI 54494

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



# **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

### **PROGRAM OUTCOMES**

Employers will expect you, as a Digital Marketing Promotions graduate, to be able to:

- · Apply digital marketing principles.
- · Create digital marketing content.
- · Promote products and services.
- Create digital marketing content for product, services, images, and ideas.
- Integrate tools and technology for digital marketing initiatives.

# **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students who successfully complete Social Media Marketing, Adobe Visual Design, and Adobe Video Design will fulfull the TSA requirement.

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success 🗷

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes

and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

# **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10104102 10104108 10104180	Marketing Principles  Adobe Visual Design Internet and Mobile Marketing	<b>9 credits</b> 3 3 3
<b>Term</b> 10104107 10104109 10104121	Social Media Marketing Adobe Video Design Fundamentals of Marketing Communications &	<b>9 credits</b> 3 3
	To	otal credits 18

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

# **COURSE DESCRIPTIONS**

# **Adobe Video Design** 10104109.....3 credits

This course develops marketing communication skills in digital video production. Topics include collaboration, design, video production, and audio production using Adobe Premier. Learners will develop skills in storytelling, capturing and editing video and audio, and finalizing content for use in social media, web, and other marketing mediums. The design role of the marketer will be discussed throughout the class. Learners should possess basic keyboarding, mouse, and computer skills and should be familiar with Microsoft Windows.

# Adobe Visual Design 10104108.....3 credits

Provides a project-based, marketing-focused exploration of key Adobe graphic design products to include Photoshop, InDesign, and Illustrator. Students are instructed on document setup, creation techniques, and file formats for both digital and print media required for marketing communications. An introduction to the application of imagery, typography, and color management will also be included. The design role of the marketer will be discussed throughout the class. Learners should possess basic keyboarding, mouse, and computer skills and should be familiar with Microsoft Windows.

# Fundamentals of Marketing Communications & 10104121.....3 credits

This course prepares the learner to create and manage a wide range of internal and external organizational communications. Learners will be instructed on the interpersonal communication techniques required for success as a marketing professional. Topics will include preparing professionally written content, effectively using verbal and non-verbal communication in a business setting, developing a professional appearance and polish, presentation techniques for the creation and delivery of complex marketing materials, writing press releases, managing crises, and speaking with the media.

# Internet and Mobile Marketing 10104180.....3 credits

Introduces the fundamentals and methodologies for developing effective, Internet-based, digital marketing strategies. Specific areas of focus include search engine marketing (SEM) and optimization (SEO), pay-per-click (PPC), website analytics, webpage and content optimization, and best practices for online advertising and email marketing. Additionally, mobile marketing topics such as developing a mobile strategy, planning a mobile web presence, and the effective use of mobile apps and tactics are explored.

# Marketing Principles 10104102 ......3 credits

This course serves as an introduction to the fundamental marketing concepts used to apply marketing strategies to product development, distribution, pricing, and promotion of goods and services.

# **Social Media Marketing** 10104107 .....3 credits

Addresses how social media has transformed marketing communications from traditional mass media to individualized marketing. Using a variety of social media tools and platforms, this class explores the different methodologies for social media marketing. Topics include creating social media, integrating social media as part of a marketing campaign, the concept of viral marketing, measuring social media success through analytics, and how organizations and individuals have successfully applied this form of marketing.



# EARLY CHILDHOOD EDUCATION

Associate in Applied Science (AAS)
Program Code: 10-307-1
Total Credits: 60-61

Graduates of the Early Childhood Education program have the handson knowledge and skills to work confidently with young children in a variety of settings. Mid-State's program lets you work directly with teachers in early childhood educational settings and develop creative and educational activities within the teaching cycle. You'll also learn of the physical, emotional, intellectual, and social development of children spanning infancy through school age as well as how to recognize typical and exceptional patterns of growth.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Criminal Background Statement of Understanding and Release of Information Form

Other:			
,			

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS
1001 Centerpoint Drive

1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS

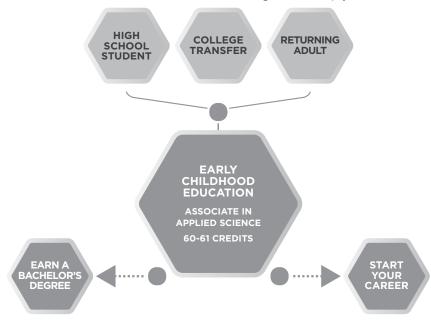
500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



# **CAREER OPTIONS**

- Child Care Center Teacher
- Early Head Start Teacher
- · Educational Assistant

# **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Cardinal Stritch University, Colorado State University Global, Concordia University, Grand Canyon University (GCU), Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), Northland College, University of Phoenix, UW-Green Bay, UW-La Crosse, UW-Milwaukee, UW-Oshkosh, UW-Parkside, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Superior, UW-Whitewater, Viterbo University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

### **PROGRAM OUTCOMES**

Employers will expect you, as an Early Childhood Education graduate, to be able to:

- · Apply child development theory to practice.
- Cultivate relationships with children, families, and the community.
- · Assess child growth and development.
- Use best practices in teaching and learning.
- · Demonstrate professionalism.
- Integrate health, safety, and nutrition practices.

# **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will be assessed using a portfolio.

Students enrolling in the Early Childhood Education program will have the opportunity to complete coursework toward specific registry credentials, including preschool, infant/toddler, and inclusion.

Students enrolled in practicum courses will combine classroom learning experiences with eight to twelve hours per week of purposeful experience in local early childhood centers working with children from infancy through school age.

# **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as an early childhood education provider is available at **mstc.edu/programs/early-childhood-education**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

# PROGRAM PROGRESSION AND COMPLETION

The following requirement must be met in order to progress in the Early Childhood Education program:

A Criminal Background Check (CBC) through the Wisconsin Department of Justice and Wisconsin Department of Health Services/Department of Children and Families/Bureau of Regulation and Licensing must show no record of crimes that would prevent persons from being employed in an early childhood setting licensed by the Department of Health Services/Department of Children and Families/Bureau of Regulation and Licensing. The background check process will include fingerprinting and will require students to visit a Fieldprint location in order to have their fingerprints scanned. A current list of crimes prohibiting one from being licensed to care for children in Wisconsin can be found at https://dcf.wisconsin.gov/files/publications/pdf/5206.pdf.

In order to progress in and successfully complete the program, students must:

- Repeat courses not completed with a "C" or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of "C" or better in all courses required for graduation.

Please note that the ability to repeat a course is dependent upon availability of all courses. Students may be required to apply for program re-entry in order to repeat a course within the program's instructional area.

### PRACTICUM-RELATED REQUIREMENT

Prior to placement at a practicum site, students need to pay for a five-year criminal background check/fingerprint and provide documentation of required health work to the Mid-State Technical College Early Childhood Program coordinator. A background check will also be required to be completed on a yearly basis while in the program.

Practicum sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete practicum courses. Mid-State will make two attempts to place a student in an appropriate practicum experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the practicum course and will not be able to advance in the program.

Prior to beginning a practicum experience students must:

- a. Provide evidence of current CPR/first aid, including infant and toddler.
- b. Provide evidence of current completion certificates for Shaken Baby Syndrome, Sudden Infant Death Syndrome, Mandated Reporter, and Darkness to Light Trainings.
   Note: Throughout each of the four practicum courses students are required to maintain current completion certificates in each of the above-listed topic areas. In the event that any certificate expires before the student
  - the event that any certificate expires before the studer successfully completes each of the four practicum courses, the student will be required to complete the necessary training to obtain a valid completion certificate. Any additional cost incurred to update the certificate(s) is the responsibility of the student.
- c. Complete form DCF/F(CFS/0054) Staff Health Report-Child Care Provider (revision date R02/2009).
- d. Successfully complete Wisconsin Early Learning Standards training.
- e. Meet the identified Technical Standards necessary to be successful in practicum placement.

# STUDENT HANDBOOK NOTES: Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology. **GRADUATION REQUIREMENT** The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information. **GPS for Student Success** 10890102 .....1 credit Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement. ADDITIONAL COURSES AS NEEDED The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores. Intro to College Reading 10838104 ......2 credits Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources. Intro to College Writing 10831103 ......3 credits Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State. Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended. Pre-Algebra 10834109 ......3 credits Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses. Prerequisite: Accuplacer Math score of 65. Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# **SAMPLE FULL-TIME CURRICULUM OPTION**

Term	18 cred	ite
10307108	ECE: Early Language & Literacy	3
10307100	ECE: Soc S, Art, & Music	
10307167	ECE: Health, Safety, & Nutrition 🕝	3 3 3 3
10307174	ECE: Introductory Practicum 🕝	3
10801136	English Composition 1 🗹	3
10801196	Oral/Interpersonal Communication -or- 🗹	
10801198	Speech &	3
Term	15-16 cred	its
10307148	ECE: Foundations of Early	
	Childhood Education 🗹	3
10307175	ECE: Preschool Practicum	3
10307179	ECE: Child Development	3 3 3 3
10307188 10804107	ECE: Guiding Children's Behavior   College Mathematics	5 7
10604107	-or-	3
10804118	Intermediate Algebra with Applications 🗹	4
	-or-	
10804189	Introductory Statistics 🗹	3
Term	15 cred	its
10307112	ECE: STEM	3
10307151	ECE: Infant & Toddler Development	3
10307177	ECE: Intermediate Practicum	3 3 3
10307187	ECE: Children with Differing Abilities	3
10809172	Introduction to Diversity Studies <b>2</b> -or-	3
10809196	Intro to Sociology 🗹	5
Term	12 cred	its
10307195	ECE: Family and Community Relationships	3
10307199	ECE: Advanced Practicum	3
10809166	Intro to Ethics: Theory & Application & -or-	
10809195	Economics &	3
10809188	Developmental Psychology <b>Z</b> -or-	3
10809198	Intro to Psychology 🗷	3
	Total Credite CO	61
	Total Credits 60-	.01

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

# SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10307110 10307148 10307108	BCE: Soc S, Art, & Music 3 ECE: Foundations of Early Childhood Education  3 ECE: Early Language & Literacy 3	
<b>Term</b> 10307179 10809172 10809196	6 credits ECE: Child Development 3 Introduction to Diversity Studies & -or- Intro to Sociology & 3	
<b>Term</b> 10307151 10801196 10801198	6 credits ECE: Infant & Toddler Development 3 Oral/Interpersonal Communication -or-  Speech  3	
<b>Term</b> 10307188 10801136	ECE: Guiding Children's Behavior  3 English Composition 1  3	
<b>Term</b> 10804107	College Mathematics 2 3	
10804118 10804189 10809188	Intermediate Algebra with Applications 2 4 -or- Introductory Statistics 2 3 Developmental Psychology 2 -or-	
10809198 <b>Term</b> 10307167	Intro to Psychology 2 3  Secretits  ECE: Health, Safety, & Nutrition 2 3	
<b>Term</b> 10307174 10307112	ECE: Introductory Practicum 2 3 ECE: STEM 3	
<b>Term</b> 10307175 10809166 10809195	6 credits ECE: Preschool Practicum 3 Intro to Ethics: Theory & Application & -or- Economics & 3	
<b>Term</b> 10307177 10307187	ECE: Intermediate Practicum 3 ECE: Children with Differing Abilities 3	
	6 credits ECE: Family and Community Relationships 3 ECE: Advanced Practicum 3	
	Total Credits 60-61	

# College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Developmental Psychology &

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **ECE: Advanced Practicum**

10307199.....3 credits

In this final 3-credit practicum course you will demonstrate competence in supporting child development through observation, assessment and implementation of teaching strategies as you work in and learn about and apply the course competencies in an actual early childhood setting. You will demonstrate a high level of skill in fostering relationships with children, families and early childhood professionals, and use skills learned in a lead teacher role to develop a career plan to transition from student to early childhood education professional.

Prerequisite: ECE: Intermediate Practicum 10307177

# **ECE: Child Development**

10307179.....3 credits

The 3-credit course examines child development within the context of the early childhood education setting. Course competencies include: integrate strategies that support diversity, cultural responsiveness, and anti-bias perspectives; analyze social, cultural, and economic influences on child development: summarize child development theories: analyze development of children ages three through five: analyze development of children ages five through eight: relate child development research findings to teaching practice; analyze the role of heredity and the environment; examine the role of brain development in early learning (ages 3-8); examine developmental and environmental assessment strategies for children ages 3-8.

# **ECE: Children with Differing Abilities** 10307187.....3 credits

This 3-credit course focuses on the child with differing abilities in an early childhood education setting. Course competencies include: integrate strategies that support diversity, cultural responsiveness, and anti-bias perspectives: promote inclusive programs for young children; apply legal and ethical requirements including, but not limited to, ADA and IDEA; examine the consultation process to embed intervention in natural based settings; differentiate between typical and exceptional development; analyze the differing abilities of children with physical, cognitive, health/medical, communication, and/or behavioral/emotional disorders; identify community and professional resources; interpret an individual educational plan (IEP/IFSP) for children with developmental differences: adapt curriculum to meet the needs of children with developmental differences; examine strategies for cultivating partnerships with families who have children with developmental differences.

# **ECE: Early Language & Literacy** 10307108 .....3 credits

This course explores strategies to encourage the development of early language and literacy knowledge and skill building in children birth to 8 years of age. Learners will investigate the components of literacy including; literacy and a source of enjoyment, vocabulary and oral language, phonological awareness, knowledge of print, letters and words, comprehension and an understanding of books and other texts. Theories and philosophies regarding children's language and literacy development will be addressed. Dual language learning will be examined within the context of developmentally appropriate practices. Assessment tools for early language and literacy acquisition will be reviewed.

# ECE: Family and Community Relationships 10307195.....3 credits

In this 3-credit course you will examine the role of relationships with family and community in early childhood education. Course competencies include: implement strategies that support diversity, cultural responsiveness, and anti-bias perspectives when working with families and community; analyze contemporary family patterns and trends; identify strategies to strengthen and support families; explore effective communication strategies; discover strategies for developing respectful and reciprocal relationships with families; analyze strategies to promote family engagement in early childhood education programs; explore a variety of formats for meeting with families in their contexts; advocate for children and families; and explore community resources that provide a range of services for children and families.

# ECE: Foundations of Early Childhood Education © 10307148.....3 credits

This 3-credit course introduces you to the early childhood profession. Course competencies include: explore the concepts of diversity, cultural responsiveness, and anti-bias as it relates to early childhood education, investigate the history of early childhood education, examine regulatory requirements for early childhood education programs in WI, summarize types of early childhood education settings, identify the components of a quality early childhood education program, summarize responsibilities of early childhood education professionals, explore early childhood curriculum models and examine the critical role of play as it relates to developmentally appropriate practice.

# ECE: Guiding Children's Behavior © 10307188.....3 credits

This 3-credit course examines positive strategies to guide children's behavior in the early childhood education setting. Course competencies include: integrate strategies that support diversity, cultural responsiveness, and anti-bias perspectives; analyze techniques for and effects of strong relationship-building with children and families; identify positive and proactive guidance principles and techniques to support children; analyze environmental influences on child behavior; identify strategies that support children's active engagement in the learning environment; identify strategies that proactively teach emotional literacy and regulation techniques; identify strategies that proactively teach friendship skills; identify strategies that proactively teach children calming, relaxation, and problem-solving techniques; utilize observation and assessment techniques to assess and interpret behavior; create a behavior support plan based on a functional behavior assessment; create a guidance philosophy. This course meets the requirements of the "24 hour Wisconsin" Pyramid Model training.

# ECE: Health, Safety, & Nutrition © 10307167.....3 credits

This 3-credit course examines the topics of health, safety, and nutrition within the context of the early childhood educational setting. Course competencies include: integrate strategies that support diversity, cultural responsiveness, and anti-bias perspectives; examine governmental regulations and professional standards as they apply to health, safety, and nutrition; plan a safe early childhood environment; plan a healthy early childhood environment; plan nutritionally sound menus; examine child abuse and neglect issues and mandates; describe Sudden Infant Death Syndrome (SIDS) risk reduction strategies, describe strategies to prevent the occurrence of Shaken Baby Syndrome (SBS); incorporate health, safety, and nutrition concepts into the children's curriculum.

# ECE: Infant & Toddler Development 10307151......3 credits

In this 3-credit course you will study infant and toddler development as it applies to an early childhood education setting. Course competencies include: integrate strategies that support diversity, cultural responsiveness, and anti-bias perspectives; analyze development of infants and toddlers (conception to thirty-six months); correlate prenatal and postnatal conditions with development; summarize child development theories; analyze the role of heredity and the environment; examine culturally and developmentally appropriate environments for infants and toddlers, examine the role of brain development in early learning (conception through thirty-six months); examine caregiving routines as curriculum; and examine developmental and environmental assessment strategies for infants and toddlers.

# **ECE: Intermediate Practicum**

10307177.....3 credits

In this 3-credit course you will be implementing regulations and standards for quality early childhood education, applying knowledge of child development and positive guidance, utilizing observation and assessment techniques, and assessing developmentally appropriate environments for children.

Prerequisites: ECE: Introductory Practicum 10307174; ECE: Preschool Practicum 10307175; Corequisite: ECE: Infant and Toddler Development 10307151

# ECE: Introductory Practicum ®

10307174.....3 credits

In this 3-credit practicum course you will learn about and apply the course competencies in an actual early childhood setting. You will explore the standards for quality early childhood education, demonstrate professional behaviors, and meet the requirements for training in the Wisconsin Model Early Learning Standards.

Prerequisite: Admission to Early Childhood Education program 103071, Corequisites: ECE: Health, Safety, & Nutrition 10307167; ECE: Early Language & Literacy 10307108 OR ECE: Soc S, Art, & Music 10307110. Students must meet the state administrative code requirements to be in an Early Childhood Education setting (including both prior coursework and Caregiver Background Check).

# **ECE: Preschool Practicum**

# 10307175.....3 credits

This course will apply as the capstone course in The Registry Preschool Credential. You will be placed or working in an early childhood setting with 3-5 year old children and create a portfolio that prepares you for The Registry commission. In this course you will be implementing regulations and standards for quality early childhood education, applying knowledge of child development and positive guidance, utilizing observation and assessment techniques, and assessing developmentally appropriate environments for preschoolers.

Prerequisite: Introductory Practicum 10307174; Corequisites: ECE: Early Language & Literacy 10307108, ECE: Soc S, Art, & Music 10307110; ECE: Child Development 10307179 and ECE: Guiding Children's Behavior

# ECE: Soc S, Art, & Music

**10307110** ...... 3 credits This 3-credit course will focus on beginning level curriculum development in the specific integrated content areas of social studies, art, music, & movement (SSAMM).

# **ECE: STEM**

# 10307112.....3 credits

This 3-credit course will focus on the beginning level curriculum development in the specific integrated content areas of science, technology, engineering and mathematics.

# **Economics Z**

# 10809195 .....3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of

236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# English Composition 1 2

# 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

# Intermediate Algebra with Applications & 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Ethics: Theory & Application & 10809166 .....3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Psychology & 10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236. Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Sociology &

10809196 .....3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Introduction to Diversity Studies & 10809172......3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Introductory Statistics & 10804189 ......3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 834109 with a grade of "C" or better or College Math 804107 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Speech ☑ 10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.



# EMERGENCY MEDICAL TECHNICIAN

**Technical Diploma** 

Program Code: 30-531-3

**Total Credits: 5** 

The Emergency Medical Technician (EMT) program at Mid-State prepares students with the knowledge and skills needed to work as an entry-level EMT. This hands-on 180-hour program consists of classroom lectures, practical skill labs, laboratory simulations, and pre-hospital clinical experiences. Successfully completing the program qualifies you to take the National Registry of EMT's certification exam required to apply for state licensure. Graduates of the Emergency Medical Technician technical diploma may advance into either the EMT-Paramedic program or Paramedic Technician program.

Mid-State's Emergency Medical Technician program prepares students to obtain the required licensure to be employed/practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examination, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

# **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

### **CHECKLIST:**

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

• 4

Where: \_\_\_\_\_

With:

When:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Criminal Background Statement of Understanding and Release of Information Form

Other:			

mstc.edu 888.575.6782 TTY: 711





MID-STATE
TECHNICAL COLLEGE

**ADAMS CAMPUS** 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

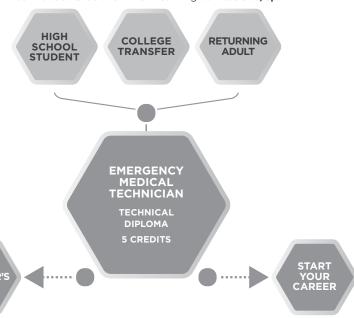
500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



# **OTHER OPTIONS**

# **RELATED PROGRAMS**

- Advanced Emergency Medical Technician
- Criminal Justice-Corrections & Community Advocacy
- Criminal Justice-Law Enforcement 720 Academy
- Criminal Justice-Studies
- Emergency Services Management
- EMT-Paramedic
- Fire Protection Technician
- Firefighter Technician
- Paramedic Technician

# **CAREER OPTIONS**

• Emergency Medical Technician

# **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

Graduates of the Emergency Medical Technician technical diploma may advance into either the EMT-Paramedic program or Paramedic Technician program.

### **PROGRAM OUTCOMES**

Employers will expect you, as an Emergency Medical Technician graduate, to be able to:

- Prepare for incident response and EMS operations.
- Integrate pathophysiological principles and assessment findings to provide appropriate patient care.
- Demonstrate EMT skills associated with established standards and procedures for a variety of patient encounters.
- Communicate effectively with others.
- · Demonstrate professional behavior.
- Meet state competencies for EMT certification.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting during the program orientation on the first day of class.

# **ADDITIONAL ENTRY CRITERIA**

To apply to the Emergency Medical Technician program, please submit the following document to Mid-State Admissions:

· Criminal Background Statement of Understanding and Release of Information form.

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

# **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as an emergency medical technician is available at mstc.edu/programs/emergency-medicaltechnician. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

# **CLINICAL-RELATED REQUIREMENTS**

Prior to placement at a clinical site, students will be required to provide documentation of required health work and current healthcare provider CPR certification via a Blackboard assignment. Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the course and will not be able to advance in the program.

Prior to beginning a clinical experience in a health care agency or ambulance service, students must:

- a. Provide evidence of completion of the required health work.
- b. Hold a Department of Health Services EMS Training Center Training Permit at the EMT level.

- c. Provide evidence of current CPR at the health care professional level by a CPR organization specified under s. DHS 110.17(1).
- d. Obtain the required uniform for clinical experiences.
- e. Assume responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.

# PROGRAM PROGRESSION

In order to be eligible to take the National Registry of Emergency Medical Technician's examination, students must:

- Receive a minimum grade of "C" in all courses within the Emergency Medical Technician program.
- A minimum grade of "C" is required in EMT Foundations in order to progress on to the EMT Applications course. The entire five credits must be completed consecutively in the same academic year in order to be eligible for National Registry testing.

# STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 .....2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing 10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# Term 3 credits 10531940 EMT Foundations 3 Term 2 credits 10531941 EMT Applications 2 Total credits 5 Term 5 credits 10531168 EMT Basic 3 Total credits 5

### Please Note:

- The curriculum offered in EMT Basic course is the same that students would experience in the EMT Foundations and EMT Applications courses.
- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

# **COURSE DESCRIPTIONS**

# **EMT Applications**

10531941.....2 credits

Course covers the bulk of the Emergency Medical Technician certification course to include the handling of cervical and spine injuries, burn injuries, heart- and breathing-related problems, shock, and other trauma injuries. Includes several lab days to practice and perfect skills, clinical time, and extensive hands-on activities. Prepares students for national certification testing for EMT. To maintain National Registry certification eligibility this course must be finished the semester following the completion of EMT Foundations. *Prerequisite: EMT Foundations 10531940* 

# **EMT Basic**

10531168.....5 credits

Based upon the State of Wisconsin/U.S. Department of Transportation/National Highway Transportation Safety Administration curriculum, this 185 hour program includes, classroom instruction-lectures, discussion, demonstrations, skill practice and an additional patient care experience, which requires a minimum of ten patient care contacts. Prerequisite: Admission to Paramedic Technician program 105311 or Emergency Medical Technician program 305313 or Fire Protection Technician program 105032

# **EMT Foundations**

10531940 .....3 credits

Covers the basics of the Emergency Medical Technician certification course to include CPR, airways, anatomy, hazmat response requirements, lifting and moving patients, incident command, and other technical information. It is the first part of a two-course system to prepare students for national certification testing for EMT.

Prerequisite: Admission to Paramedic Technician program 105311 OR Emergency Medical Technician program 305313 OR Fire Protection Technician program 105032

NOTES:		



# EMERGENCY SERVICES MANAGEMENT

Associate in Applied Science (AAS)
Program Code: 10-503-5

**Total Credits: 60** 

Mid-State's Emergency Services Management program will strengthen and advance the knowledge and skills needed for firefighters and paramedics to become supervisors. The program focuses on topics such as personnel management, risk management, OSHA, legal aspects, and community relations. Fire and EMS tracks are available to allow students an opportunity to pursue additional knowledge in their area of interest or career path. This program is online, thus the experiences will be different from a traditional course. Activities in class will strengthen collaboration, problem-solving, critical thinking, and research.

Estimated tuition and fees: mstc.edu/programcosts

# **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





**ADAMS CAMPUS** 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS

1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS

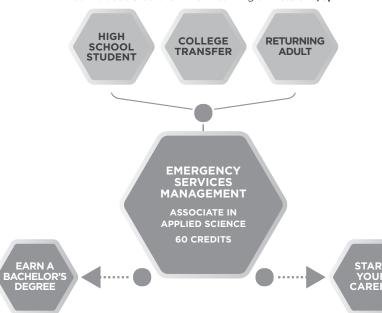
500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



# **OTHER OPTIONS**

# **RELATED PROGRAMS**

- Advanced Emergency Medical Technician
- Criminal Justice-Corrections & Community Advocacy
- Criminal Justice-Law Enforcement 720 Academy
- · Criminal Justice-Studies
- Emergency Medical Technician
- EMT-Paramedic
- Fire Protection Technician
- Firefighter Technician
- · Paramedic Technician

# **CAREER OPTIONS**

- Assistant Chief
- Captain/Lieutenant
- EMS Supervisor

# **BACHELOR'S DEGREE OPTIONS**

American Public University System, Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

### **PROGRAM OUTCOMES**

Employers will expect you, as an Emergency Services Management graduate, to be able to:

- Demonstrate the professional responsibilities of a fire or emergency services manager.
- Demonstrate critical and creative thinking in the problem-solving process.
- Apply research and best practices in the fire or emergency services professions.
- Demonstrate the professional attributes necessary for a fire or emergency services manager to lead effectively.
- Apply the legal, ethical, and regulatory standards that relate to the fire or emergency services.

# **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

# **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a fire protection technician is available at mstc.edu/programs/emergency-services-management. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

### PROGRAM PROGRESSION

Students must receive a grade of "C" or better in each of the technical and general education courses in order to qualify for graduation.

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

# **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10196135 10503121 10503143 10531170 10546100 10546112 10801136	Conflict Resolution Emergency Services Safety and Survival Building Construction for Fire Protection -or Intro to Evidence-Based EMS Essential Concepts for Health and Wellness Mental Wellness for Emergency Services English Composition 1 🗗	3
Term	16 cred	itc
10503122	Principles of Emergency	113
	Services Administration 🗹	4
10503123	Occupational Safety and Health for Emergency Services	3
10503195	Fire Behavior & Combustion <b>-or-</b>	
10531171	EMS Leadership Challenges	3 3
10804107 10809166	College Mathematics & Applicatio &n	3
_		
<b>Term</b> 10503124	15 cred Emergency Services Instructor 2*	<b>ITS</b> 3
10503125	Personnel Management for	
10503126	Emergency Services Legal Aspects of Emergency Services	3
10503126	Community Risk Reduction	3 3
10809198	Intro to Psychology 🗷	3
Term	13 cred	its
10503128	Public Information and	
10507150	Community Relations	3
10503156 10531172	Strategies, Tactics, & Incident Management & - Supervision of EMS Special Operations	or- 4
10801196	Oral/Interpersonal Communication 🕝 -or-	
10801198	Speech & Intro to American Government & -or-	3
10809122	Introduction to Diversity Studies & -or-	
10809196	Intro to Sociology 🗹	3
	Total credits	60

☑ This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

# SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10196135 10503121 10503143 10531170 10546112	Conflict Resolution 3 Emergency Services Safety and Survival 2 Building Construction for Fire Protection -or- Intro to Evidence-Based EMS 3 Mental Wellness for Emergency Services 2
<b>Term</b> 10503123 10503195 10531171 10809166	Occupational Safety and Health for Emergency Services 3 Fire Behavior & Combustion -or- EMS Leadership Challenges 3 Intro to Ethics: Theory & Application 2 3
<b>Term</b> 10546100 10801136	<b>6 credits</b> Essential Concepts for Health and Wellness 3 English Composition 1 2 3
<b>Term</b> 10503122 10804107	Principles of Emergency Services Administration 2 4 College Mathematics 2 3
<b>Term</b> 10503126 10503127 10809198	9 creditsLegal Aspects of Emergency Services3Community Risk Reduction3Intro to Psychology ☑3
<b>Term</b> 10503156 10531172 10801196 10801198	7 credits Strategies, Tactics, & Incident Management ┏ -or- Supervision of EMS Special Operations 4 Oral/Interpersonal Communication ┏ -or- Speech ┏ 3
<b>Term</b> 10503124 10503125	Emergency Services Instructor  3 Personnel Management for Emergency Services 3
<b>Term</b> 10503128 10809122 10809172 10809196	Public Information and Community Relations 3 Intro to American Government & -or- Introduction to Diversity Studies & -or- Intro to Sociology & 3  Total credits 60

# Building Construction for Fire Protection 10503143.....3 credits

Provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations, and operating at emergencies.

Prerequisite: Admission to Fire Protection Technician program 105032 or Emergency Services Management program 105035

# College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Community Risk Reduction**

10503127.....3 credits

Prepares the student to understand the assessment of community risk, the analysis of risk, risk communication, risk problem-solving, and mitigation efforts.

Prerequisite: Intro to Emergency Services 10503102

# **Conflict Resolution**

10196135.....3 credits

Students will apply different conflict resolution techniques that can be used by a manager or leader within an organization given real-world scenarios. Students will also evaluate the importance of consultation, team building, trust, and win-win outcomes from a managerial standpoint in the resolution of organizational conflict.

# **Emergency Services Instructor ☑**

10503124.....3 credits

Introduces the emergency services professional to the education system as it relates to fire and EMS education. Students explore issues in curriculum development, teaching, program direction, and development. *Prerequisite: Intro to Emergency Services 10503102* 

# Emergency Services Safety and Survival

10503121 .....2 credits

Broadens the scope of the national firefighter life safety initiatives and emphasizes their importance at the supervisory and managerial levels. The life safety initiatives are examined from firefighter and EMS provider perspectives. *Prerequisite: Intro to Emergency Services 10503102* 

# **EMS Leadership Challenges**

10531171.....3 credits

Explores the unique challenges that face EMS leaders in today's environment. Emphasizes key issues such as recruitment, retention, education, and mental health.

# English Composition 1 2

10801136 ......3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

# Essential Concepts for Health and Wellness 10546100 ......3 credits

An introductory course focusing on basic health and wellness promotion principles at the individual level. Basic principles include physical, mental, and spiritual. Students explore a holistic view of health and wellness concepts covering healthy lifestyle choices, managing stress, individual wellness perspective and how economics can positively and negatively impact the health and wellness of an individual.

# Fire Behavior & Combustion

10503195.....3 credits

Explores the theories and fundamentals of how and why fires start, spread, and are controlled.

Prerequisite: Building Construction for Fire Protection 10503143 or Intro to Emergency Services 10503102

# Intro to American Government 🗹 10809122.....3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Ethics: Theory & Application © 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Evidence-Based EMS 10531170......3 credits

Examines evidence-based medicine and its application to EMS operations. Topics of study include airway management, cardiac resuscitation, prehospital ultrasound, dispatch policies, and others.

# Intro to Psychology ©

aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Sociology &

culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Introduction to Diversity Studies & 10809172......3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Legal Aspects of Emergency Services 10503126......3 credits

Addresses the federal, state, and local laws that regulate emergency services and includes a review of national standards, regulations, and consensus standards.

Prerequisite: Intro to Emergency Services 10503102

# Mental Wellness for Emergency Services 10546112 ......2 credits

Learners in this course will examine the issues that affect employees' mental health. They will study important concepts, such as recognizing mental health issues, improving work/life balance, creating a healthy work culture, and the managers' role in supporting the mental health of their staff.

# Occupational Safety and Health for Emergency Services 10503123......3 credits

Introduces the basic concepts of occupational health and safety as it relates to emergency services organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations.

Prerequisite: Intro to Emergency Services 10503102

# Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Personnel Management for Emergency Services 10503125......3 credits

Examines personnel administration and the development of human resources. Topics of study include personnel management, organizational development, productivity, recruitment and selection, performance management systems, discipline, and collective bargaining. *Prerequisite: Intro to Emergency Services 10503102* 

# Principles of Emergency Services Administration 10503122......4 credits

Demonstrates the importance of the following skills necessary to manage and lead a fire and emergency services department through the challenges and changes of the 21st century: persuasion and influence, accountable budgeting, anticipation of challenges and the need for change, and using specific management tools for analyzing and solving problems.

Prerequisite: Intro to Emergency Services 10503102

# Public Information and Community Relations 10503128.....3 credits

Introduces the emergency services professional to the benefits of community information and community relations. Students explore issues in marketing, developing the message, identifying the audience, developing programs, and creating press releases.

Prerequisite: Intro to Emergency Services 10503102

# Speech 🗹

10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

# Strategies, Tactics, & Incident Management & 10503156....... 4 credits

Provides the principles of fire ground control through use of personnel, equipment, and extinguishing agents.

Prerequisite: Firefighting Principles 10503142 or Intro to Emergency Services 10503102



# **EMT-PARAMEDIC**

**Technical Diploma** Program Code: 31-531-1

**Total Credits: 38** 

Mid-State's EMT-Paramedic program provides the knowledge and skills needed to work competently as an entry-level EMT-paramedic. Students enter a joint core course cohort with Paramedic Technician degree students. Graduates earn a technical diploma upon successful completion of this program. This program consists of classroom lectures, practical skills lab, laboratory simulations, and hospital and pre-hospital clinical experiences. Upon successful completion, you will earn certifications in Advanced Cardiac Life Support, Prehospital Trauma Life Support, and Pediatric Advanced Life Support and be eligible to take the National Registry of Emergency Medical Technician written and practical examinations.

Mid-State's EMT-Paramedic program prepares students to obtain the required licensure to be employed/practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examination, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

# **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- ☐ Criminal Background Statement of Understanding and Release of Information Form
- ☐ Other:\_

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910

MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481

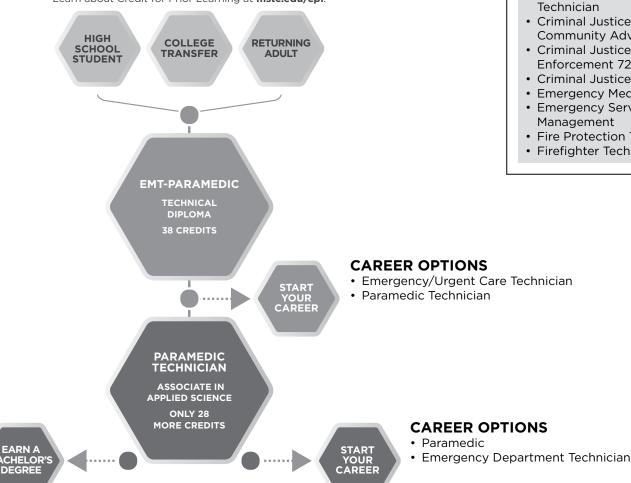
WISCONSIN RAPIDS CAMPUS 500 32nd Street North

Wisconsin Rapids, WI 54494

# **BEGIN AT ANY POINT** IN THE PATHWAY

**College Credit • Dual Credit** Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



# OTHER OPTIONS

### **RELATED PROGRAMS**

- · Advanced Emergency Medical Technician
- Criminal Justice-Corrections & Community Advocacy
- · Criminal Justice-Law Enforcement 720 Academy
- · Criminal Justice-Studies
- Emergency Medical Technician
- Emergency Services Management
- Fire Protection Technician
- Firefighter Technician

**BACHELOR'S DEGREE OPTIONS** 

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

### **PROGRAM OUTCOMES**

Employers will expect you, as an EMT-Paramedic graduate, to be able to:

- Prepare for incident response and EMS operations.
- Integrate pathophysiological principles and assessment findings to provide appropriate patient care.
- Demonstrate paramedic skills associated with established standards and procedures for a variety of patient encounters.
- · Communicate effectively with others.
- · Demonstrate professional behavior.
- Meet state and national competencies listed for paramedic certification(s).

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will fulfill the TSA requirements when they complete the clinical and field courses.

The EMT-Paramedic program contains the same core courses (10-531) as the Associate Degree Paramedic Technician program. Completion of the Emergency Medical Technician program is required prior to beginning the Paramedic Technician core courses.

EMT-Paramedic is a 1,150-hour program based upon the US Department of Transportation Administration/Wisconsin Bureau Local Health Support and EMS curriculum.

# **ADDITIONAL ENTRY CRITERIA**

To apply to the EMT-Paramedic program, please submit the following documents to Mid-State Admissions:

- Criminal Background Statement of Understanding and Release of Information form.
- · A current Wisconsin EMT license.

Mid-State Technical College • Admissions 500 32nd Street North Wisconsin Rapids, WI 54494

### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as an EMT-paramedic is available at **mstc.edu/programs/emt-paramedic**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

# **CLINICAL-RELATED REQUIREMENTS**

Prior to placement at a clinical site, students need to pay for a criminal background check through a private vendor. Students will be required to provide documentation of required health work and current healthcare provider CPR certification via a Blackboard assignment. Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the course and will not be able to advance in the program.

Prior to beginning a clinical experience in a health care agency or ambulance service, students must:

- a. Provide evidence of completion of the required health work.
- b. Hold a current State of Wisconsin EMT license.
- c. Hold a Department of Health Services EMS Training Center Training Permit at the paramedic level.
- d. Provide evidence of current CPR at the health care professional level by a CPR organization specified under s. DHS 110.17(1).
- e. Obtain the required uniform for clinical experiences.
- f. Assume responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.

### PROGRAM PROGRESSION

In order to maintain a passing status and progress in the EMT-Paramedic program, students must receive a grade of "C" or better in each of the paramedic core courses.

Failure to obtain a grade of "C" in any core course will prevent a student from progressing onto the next course in the sequence until they have retaken the course and achieved a grade of "C" or better.

This requirement also applies to the last class in the sequence, as a grade of "C" or better is required in all courses in order to retain eligibility to take the National Registry exam.

# STUDENT HANDBOOK NOTES: Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology. **GRADUATION REQUIREMENT** The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information. **GPS for Student Success** 10890102 .....1 credit Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement. ADDITIONAL COURSES AS NEEDED The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores. Intro to College Reading 10838104 ......2 credits Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources. Intro to College Writing 10831103 ......3 credits Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State. Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended. Pre-Algebra 10834109 ......3 credits Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses. Prerequisite: Accuplacer Math score of 65. Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10531911 10531912 10531913 10531914 10531915 10531918 10531955 10531959	EMS Fundamental Paramedic Medical Principles Patient Assessment Principles Prehospital Pharmacology Paramedic Respiratory Managemen Advanced Resuscitation Paramedic Cardiology 1 Paramedic Clinical	19 credits
Term 10531919 10531920 10531921 10531922 10531923 10531956 10531957 10531958 10531960	Paramedic Medical Emergencies Paramedic Trauma Special Patient Populations EMS Operations Paramedic Capstone Paramedic Cardiology 2 Paramedic Field Experience Paramedic Field Leadership Paramedic Clinical/Field Prep	19 credits 4 3 3 1 1 2 3 1 1
	Total	credits 38

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

NOTES:		

# **Advanced Resuscitation**

# 10531918.....1 credit

By teaching advanced cardiac life support (ACLS) and pediatric advanced life support (PALS) methodologies and protocols, this course prepares the paramedic student to integrate comprehensive knowledge of causes and pathophysiology into the management of shock, respiratory failure, respiratory arrest, cardiac arrest, and peri-arrest states. Emphasizes early intervention to prevent respiratory and/or cardiac arrest if possible.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

### **EMS Fundamental**

# 10531911 .....2 credits

Provides learners with comprehensive knowledge of EMS systems, safety, well-being, legal issues, and ethical issues, with the intended outcome of improving the health of EMS personnel, patients, and the community. Learners obtain fundamental knowledge of public health principles and epidemiology as related to public health emergencies, health promotion, and illness/injury prevention. Introduces learners to comprehensive anatomical and medical terminology with the aim of fostering the development of effective communications with colleagues and other healthcare professionals.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# **EMS Operations**

# 10531922 .....1 credit

Provides paramedic students with the knowledge of operational roles and responsibilities to ensure patient, public, and EMS personnel safety.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# **Paramedic Capstone**

# 10531923 .....1 credit

Provides students with a final opportunity to incorporate their cognitive knowledge and psychomotor skills through labs and scenario-based practice and evaluations prior to taking the National Registry written and practical examinations. Technical skills attainment (TSA) for each student will be compiled and/or documented within this course as required by the DHS-approved paramedic curriculum.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# Paramedic Cardiology 1

# 10531955.....2 credits

Provides basic knowledge to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment for the patient with cardiovascular disease.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# Paramedic Cardiology 2

# 10531956.....2 credits

Teaches the paramedic student knowledge and skills to integrate assessment findings with principles of cardiovascular anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a variety of cardiovascular complaints.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# **Paramedic Clinical**

# 10531959......2 credits

Enhances learning through the practice of paramedicine in a healthcare environment. Learners will experience actual patients under the supervision of instructors or approved preceptors. Learners will also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# Paramedic Clinical/Field Prep

# 10531960 .....1 credit

Enhances learning through the practice of paramedicine in a healthcare or field environment. Learners will experience actual patients under the supervision of instructors or approved preceptors.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# Paramedic Field Experience

# 10531957 ......3 credits

Provides the opportunity to enhance learning through the practice of paramedicine in a field environment and through experiences with actual patients under the supervision of instructors or approved preceptors. Students may also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course. Successful completion of this course requires the student to meet all clinical and field competency requirements at the paramedic level as defined by WI DHS EMS.

Prerequisites: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311 and Advanced Resuscitation 10531918

# Paramedic Field Leadership

# 10531958 ......1 credit

Provides the opportunity to act as the field team leader in a field environment and through experiences with actual patients under the supervision of instructors or approved preceptors. Successful completion of this course requires the student to meet all team leader competency requirements at the paramedic level as defined by WI DHS EMS and the CoAEMSP.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# Paramedic Medical Emergencies

# 10531919...... 4 credits

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a medical complaint.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# Paramedic Medical Principles

# 10531912...... 4 credits

Addresses the complex depth of anatomy, physiology, and pathophysiology of major human systems while also introducing paramedic students to the topics of shock, immunology, and bleeding.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# **Paramedic Respiratory Management**

# 10531915.....2 credits

Teaches the paramedic student to integrate complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patient airway, adequate mechanical ventilation, and respiration for patients of all ages. Also provides specific knowledge pertaining to the respiratory system to ensure the student is prepared to formulate a field impression and implement a comprehensive treatment plan for a patient with a respiratory complaint.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

### **Paramedic Trauma**

# 10531920.....3 credits

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for an acutely injured patient.

Prerequisites: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311 and Advanced Resuscitation 10531918

# Patient Assessment Principles

### 10531913.....3 credits

Teaches the paramedic student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. Uses a structured and organized assessment process that draws on knowledge of anatomy, physiology, pathophysiology, life span development, and changes that occur to the human body with time. Using this process students learn to develop a list of differential diagnoses through clinical reasoning and modify the assessment as necessary to formulate a treatment plan for their patients. Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# **Prehospital Pharmacology**

# 10531914 .....3 credits

Provides the paramedic student with the comprehensive knowledge of pharmacology required to formulate and administer a pharmacological treatment plan intended to mitigate emergencies and improve the overall health of the patient.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

# **Special Patient Populations**

# 10531921.....3 credits

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for patients with special needs. Also includes gynecological emergencies, along with special considerations in trauma. Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311



# **ENTREPRENEURSHIP**

**Technical Diploma** 

Program Code: 31-145-2

**Total Credits: 30** 

Mid-State's Entrepreneurship program prepares students to provide the vision for their created business as well as lead staff management, financial planning, marketing strategies, HR functions, and the development of policies and procedures. Graduates will also be equipped to integrate their knowledge and skills within existing organizations. Through a wide variety of activities, students will explore vital components of entrepreneurial practices such as business plan development, financial principles, staffing needs and support, modern marketing strategies, and effective communication skills—all to successfully start and sustain their own business.

Estimated tuition and fees: mstc.edu/programcosts

# **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

### **CHECKLIST:**

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_

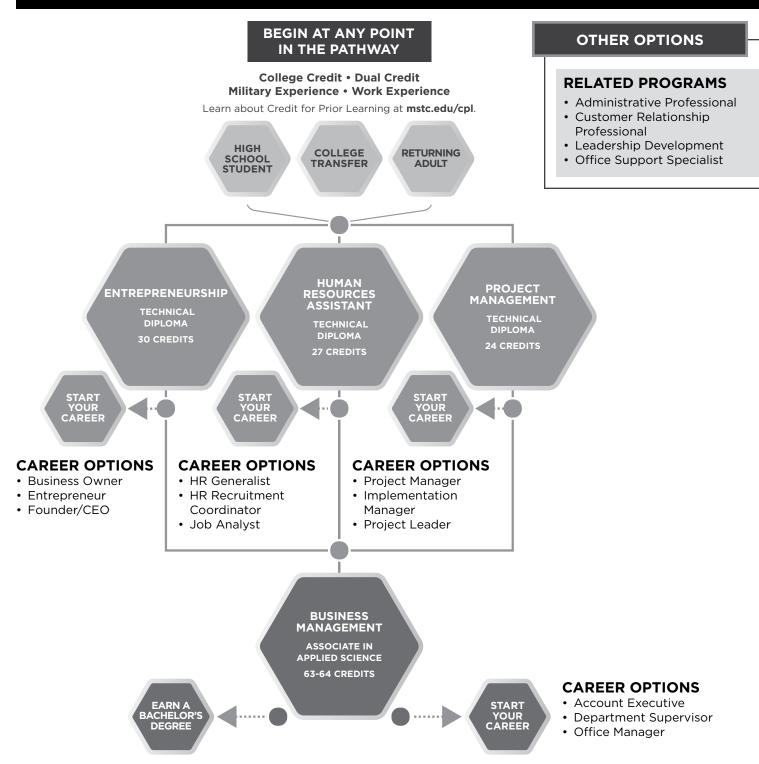
mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

500 32nd Street North Wisconsin Rapids, WI 54494



# **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

### PROGRAM OUTCOMES

Employers will expect you, as an Entrepreneurship graduate, to be able to:

- Demonstrate an entrepreneurial mindset.
- Develop a business canvas and/or plan.
- Outline business operational plan.
- Develop a business marketing plan.

# **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will complete a performance-based business plan in the Entrepreneurial Management course to fulfill the TSA requirement.

NOTES:		

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

# **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### SAMPLE FULL-TIME CURRICULUM OPTION **Term** 15 credits 10102101 Intro to Business 🗹 3 3 10102104 Business Law Z 10103106 Microsoft Office-Introduction Z 3 10104102 Marketing Principles 🗹 3 10801136 English Composition 12 3 15 credits **Term** 10102110 **Employment Law** 10102121 Finance and Budgeting Z 3 10102131 Entrepreneurial Management 3 10196193 **Human Resource Management** 3 10801198 Speech Z 3 **Total credits 30**

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

### SAMPLE PART-TIME CURRICULUM OPTION **Term** 9 credits 10102101 Intro to Business Z 3 3 10103106 Microsoft Office-Introduction & 10104102 Marketing Principles & 3 Term 9 credits 10102121 Finance and Budgeting 🗹 3 10196193 Human Resource Management 3 10801136 English Composition 1 🗷 3 Term 6 credits 10102104 Business Law Z 10801198 3 Speech Z Term 6 credits 10102131 **Entrepreneurial Management** 3 10102110 **Employment Law** 3 **Total credits 30**

NOTES:			

# Business Law &

# 10102104.....3 credits

Introduces the basic foundation of laws and regulatory systems applicable to the business environment. Students examine the UCC, contract torts, agency law, and business and cybercrime. Students apply business legal theory in conjunction with ethical decision making through practical application.

# **Employment Law**

# 10102110.....3 credits

Introduces a broad scope of employment laws and provides the opportunity to apply these laws to the employment arena. Includes laws relating to anti-discrimination, including the Civil Rights Act, ADEA, and ADA; wage and hour regulation, including FLSA; employer-provided pensions, including ERISA; health insurance, including COBRA and ACA; and unemployment and worker's compensation insurance.

# English Composition 1 2

# 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

# Entrepreneurial Management

# 10102131 ......3 credits

Introduces students to the concept of entrepreneurship. Learners study entrepreneurial practices primarily by developing a business plan for a venture of their choice. This includes comparing ways of going into business as well as developing marketing, legal, financial, products/services, management, and operations plans for a small business of their choice. Entrepreneurial behavior within companies is examined.

Prerequisite: Nine core credits from a 102, 103, 109, 196, or 623 program code.

# Finance and Budgeting &

# 10102121 ......3 credits

For the nonfinancial manager, this course introduces the language of accounting, finance, and budgeting. Provides an overview of the use and analysis of financial statements. Business planning and the foundations and development of budgets are explored. Business financing basics and the securing of necessary financing for a business are covered. Practical application of financial statement creation and analysis, budgetary activities, and finance calculations are included.

# **Human Resource Management**

# 10196193.....3 credits

Applies skills and tools necessary to perform human resource functions in an organization. Each learner demonstrates skill in following EEOC laws; writing job descriptions; recruiting, selecting, and orienting employees; developing policies and procedures; developing and conducting training; designing performance appraisal plans; developing employee development plans; and selecting compensation and benefit strategies.

Prerequisite: Nine core credits from a 102, 103, 109, 196, or 623 program code.

# Intro to Business 🗹

# 10102101.....3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

# Marketing Principles 🗷

# 10104102 ......3 credits

This course serves as an introduction to the fundamental marketing concepts used to apply marketing strategies to product development, distribution, pricing, and promotion of goods and services.

# Microsoft Office-Introduction 🗹

# 10103106 ......3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

# Speech 2

# 10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.



# **FARM BUSINESS & PRODUCTION MANAGEMENT**

**Technical Diploma** 

Program Code: 30-090-1

**Total Credits: 18** 

Mid-State's Farm Business & Production Management program teaches the skills needed to be competitive in agriculture and maximize profits. You'll learn how to identify your farm's strengths and weaknesses, analyze farm records to uncover hidden opportunities, apply proven marketing techniques, and more. Classes are offered fall and winter and include instruction in the classroom, on the farm, and via group tours. Topics include crop production, soil management, and financial planning and analysis as well as the feeding, breeding, and management of livestock.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





**ADAMS CAMPUS** 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

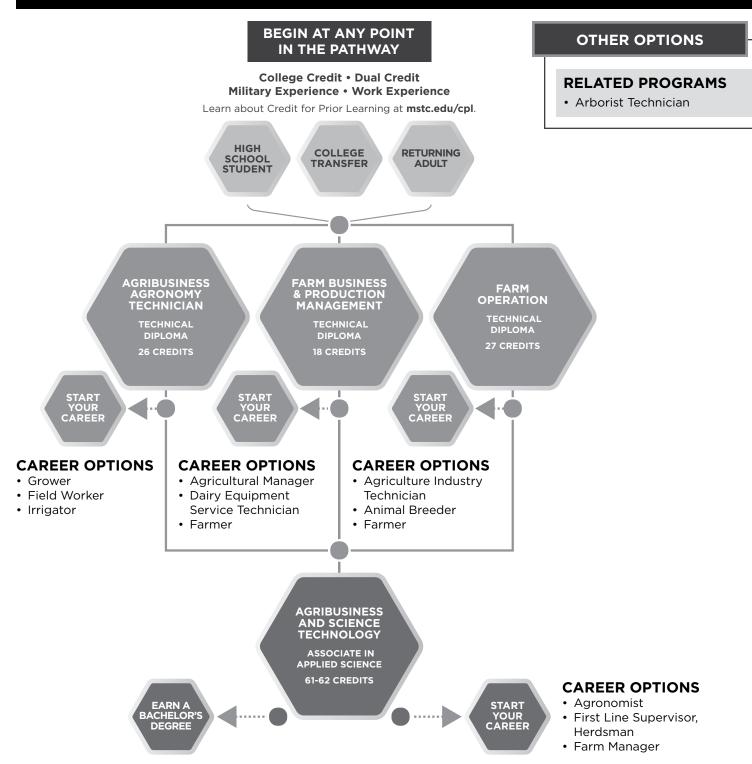
STEVENS POINT CAMPUS 1001 Centerpoint Drive

Stevens Point, WI 54481

WISCONSIN RAPIDS CAMPUS

500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**



### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Platteville, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Farm Business & Production Management graduate, to be able to:

- Utilize agronomic resources for optimal farm production.
- Evaluate livestock management plans.
- Plan for operation and maintenance of facilities and equipment.
- · Create a farm business plan.
- Apply marketing principles to agricultural enterprises.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

Students should be able to operate a calculator and understand basic math skills such as percentage, addition, subtraction, multiplication, and division. Students will be asked to draft budgets and calculate costs and returns on different farming enterprises.

The Farm Business & Production Management program runs from October through April annually. Courses in the program are offered at Mid-State's campuses in Adams, Marshfield, Stevens Point, and Wisconsin Rapids.

### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function in farm business and production management is available in the Student Services & Information Center. It is the student's responsibility to notify the Disability Services coordinator in the Student Services & Information Center to receive assistance.

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success 🗷

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

10890102 .....1 credit

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

requirements at Mid-State.

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### SAMPLE FULL-TIME CURRICULUM OPTION

	Agribusiness Financial Analysis Intro to Soil Science	18 credits 2 3
10090101 10091102	Agriculture Business Management Intro to Animal Science	3
10091103	Animal Nutrition Principles of Crop Management	4 3
	Tota	l credits 18

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- · This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10080105 10091102	Intro to Soil Science Intro to Animal Science	6 credits 3 3
<b>Term</b> 10091103 10006105	Animal Nutrition Agribusiness Financial Analysis	6 credits 4 2
<b>Term</b> 10093104 10090101	Principles of Crop Management Agriculture Business Management	6 credits 3 3 credits 18

# **COURSE DESCRIPTIONS**

# **Agribusiness Financial Analysis**

10006105.....2 credits

This course provides the student opportunities to develop necessary business skills for operating a successful farm business. These skills involve analyzing, evaluating, creating and decision-making. These skills will be used with balance sheets, Income & Expense projections, cash flow needs, budget creation, benchmarking, cost of production, inventories, credit needs and history along with loan decisions.

### **Agriculture Business Management** 10090101.....3 credits

Examines the farm business as a complex set of enterprises that all need to be managed effectively to be successful and sustainable. Students learn to develop a business plan, set short- and long-term goals, identify and implement alternatives for reaching goals. Includes strategies and tools to monitor success. Students also learn to organize and maintain farm business records as well as how to interpret and analyze the records to make sound farm management decisions.

### **Animal Nutrition**

10091103 ...... 4 credits

Includes classification and function of nutrients, deficiency symptoms, characterization of feedstuffs, and formulation of diets for domestic animals. They are also able to successfully understand the digestive processes of mono-gastric and ruminant animals.

# Intro to Animal Science

10091102.....3 credits

Introduces the basics of livestock management. Examines management of dairy, beef, sheep, and other common livestock with concentration on nutrition, feedstuff's classification, reproduction, genetics, animal behavior, animal health, and sustainable agriculture practices. Includes basic husbandry and care procedures for animals. A livestock management plan will be created and analyzed.

# Intro to Soil Science

10080105.....3 credits

Designed to provide students with fundamental knowledge of soil and soil composition. Includes study of soil types, formation factors, physical properties, biological properties, and basic soil chemistry. Units covering tillage, conservation, pH, soil management, plant nutrients, and fertilizer sources are also included. Students gain the skills required to interpret soil test reports and soil survey maps and recognize qualities of various soil types. Students perform soil sampling, residue measurements, compaction assessments, and soil loss determinations per crop rotation guidelines. A nutrient management plan is created and analyzed.

### **Principles of Crop Management** 10093104 ......3 credits

The basic principles and concepts of sound agronomic practices are discussed for corn, soybeans, small grains, and forage crops grown in Wisconsin. All sound agronomy practices are emphasized for each crop area as it relates to cultural and other specific inputs of crop production, environmental factors, and sustainable systems.



# **FARM OPERATION**

**Technical Diploma** 

Program Code: 31-080-4

**Total Credits: 27** 

The Farm Operation program at Mid-State prepares graduates to confidently run the day-to-day operations on a farm. You'll learn about livestock and their products, livestock diseases and prevention, quality milk and meat production, soils, crop production, and more. This hands-on program features agribusiness professionals who share their knowledge directly through presentations, demonstrations, and tours. Course topics include best practices for farming, such as how to manage farm records, farm computerization, critical facts about financial credit, creating a business plan, and marketing.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_

When:\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Other:

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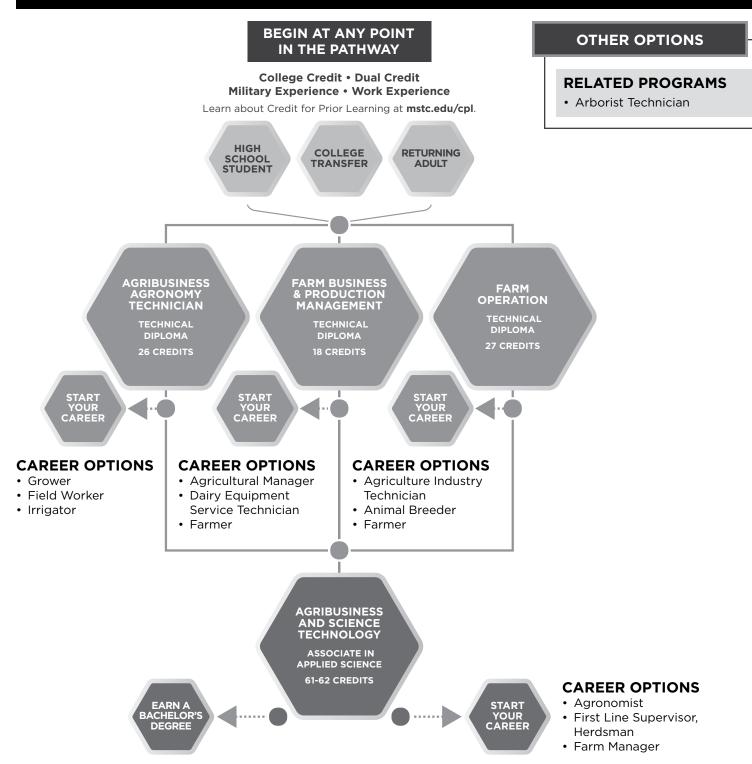
mstc.edu 888.575.6782 TTY: 711





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# **CAREER PATHWAY**



### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Platteville, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Farm Operation graduate, to be able to:

- Utilize agronomic resources for optimal farm production.
- Evaluate livestock management plans.
- Plan for operation and maintenance of facilities and equipment.
- · Create a farm business plan.
- Apply marketing principles to agricultural enterprises.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in Principles of Crop Management, Agribusiness Equipment & Facilities, Agriculture Business Management, and Intro to Animal Science courses.

Students should be able to operate a calculator and understand basic math skills, such as percentage, addition, subtraction, multiplication, and division.

Farm Operation is a 30-week program and takes a minimum of two years to complete. The program is offered in two 15-week segments with start dates in September, November, January, and February. Each segment is broken into three five-week terms, running from September to May every school year. Classes are scheduled from 10:00 a.m. – 4:00 p.m., allowing time to complete morning and evening farm work at home.

### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function in farm operations is available in the Student Services & Information Center. It is the student's responsibility to notify the Disability Services coordinator in the Student Services & Information Center to receive assistance.

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success 2 10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing 10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### SAMPLE CURRICULUM OPTION 6 credits **Term** 10080105 Intro to Soil Science 3 10091102 Intro to Animal Science 3 **Term** 7 credits 10091103 Animal Nutrition 4 10093102 Intro to Precision Agriculture 3 6 credits **Term** 10090101 Agriculture Business Management 10093104 Principles of Crop Management 3 8 credits **Term** 10003101 Agricultural Diesel Engine Systems 3 10006101 Agricultural Computations 🗹 3 10006102 Agribusiness Equipment & Facilities 2 **Total credits 27**

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

NOTES:	

## **Agribusiness Equipment & Facilities** 10006102.....2 credits

Examines arrangement and design of efficient farm buildings and equipment as well as construction requirements. Farmstead planning includes mapping of present facilities as well as evaluating usefulness and planning long and short-range goals for farmstead changes to improve economics, safety, efficiency and aesthetics, Environmental factors and animal wellness needs are identified, including space, ventilation, nutrition, and care. Also examines the appropriate use and care of feed, fertilizer, planting and harvesting equipment, and dairy and livestock equipment and facilities. Possible equipment/facility changes are discussed and business expansion is analyzed.

## Agricultural Computations & 10006101.....3 credits

Deals with the application of quantitative tools to support agribusiness management decisions. These management decisions are executed using spreadsheet and data analysis (e.g., Microsoft Excel) while using elementary mathematical tools in an agricultural economics context. This course is designed to prepare students for upper-level agribusiness courses as well as real-world situations in agriculture.

## Agricultural Diesel Engine Systems 10003101.....3 credits

Students learn the different uses of diesel engines in an agricultural setting. This course also provides an introduction to fuel systems, exhaust systems, and electrical systems. Use of technical service resources and precision measuring is stressed.

### **Agriculture Business Management** 10090101.....3 credits

Examines the farm business as a complex set of enterprises that all need to be managed effectively to be successful and sustainable. Students learn to develop a business plan, set short- and long-term goals, identify and implement alternatives for reaching goals. Includes strategies and tools to monitor success. Students also learn to organize and maintain farm business records as well as how to interpret and analyze the records to make sound farm management decisions.

### **Animal Nutrition**

10091103 ...... 4 credits

Includes classification and function of nutrients, deficiency symptoms, characterization of feedstuffs, and formulation of diets for domestic animals. They are also able to successfully understand the digestive processes of mono-gastric and ruminant animals.

# Intro to Animal Science

10091102 ......3 credits

Introduces the basics of livestock management. Examines management of dairy, beef, sheep, and other common livestock with concentration on nutrition, feedstuff's classification, reproduction, genetics, animal behavior, animal health, and sustainable agriculture practices. Includes basic husbandry and care procedures for animals. A livestock management plan will be created and analyzed.

# **Intro to Precision Agriculture** 10093102 ......3 credits

Explores agricultural applications of GPS, yield monitoring systems, and mapping. Students learn to interpret maps generated by precision agriculture equipment. Learners experience setup, calibration and operation of equipment/ software designed to support the production crop industry.

# **Intro to Soil Science**

10080105.....3 credits

Designed to provide students with fundamental knowledge of soil and soil composition. Includes study of soil types, formation factors, physical properties, biological properties, and basic soil chemistry. Units covering tillage, conservation, pH, soil management, plant nutrients, and fertilizer sources are also included. Students gain the skills required to interpret soil test reports and soil survey maps and recognize qualities of various soil types. Students perform soil sampling, residue measurements, compaction assessments, and soil loss determinations per crop rotation guidelines. A nutrient management plan is created and analyzed.

## **Principles of Crop Management** 10093104 .....3 credits

The basic principles and concepts of sound agronomic practices are discussed for corn, soybeans, small grains, and forage crops grown in Wisconsin. All sound agronomy practices are emphasized for each crop area as it relates to cultural and other specific inputs of crop production, environmental factors, and sustainable systems.



# FIRE PROTECTION **TECHNICIAN**

# **Associate in Applied Science (AAS)**

Program Code: 10-503-2

**Total Credits: 64** 

Firefighters are known for taking quick action and performing under pressure, and Mid-State's Fire Protection Technician program prepares students to be successful in this challenging role. Graduates learn the knowledge and techniques needed to save life and property during fires, medical emergencies, and other hazards. This program will expose you to realistic simulations, inside and outside the classroom. You will train on our state-of-the-art burn tower, fire engines, and other high-tech equipment. Developed in partnership with local fire departments, this program ensures you have a competitive edge when starting your career, and local demand for highly skilled firefighters is rising.

Certain courses in Mid-State's Fire Protection Technician program prepare students to obtain state certification to be employed/ practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examinations, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910

MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS

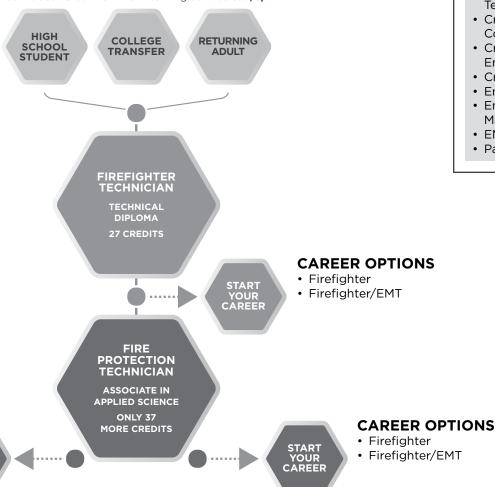
1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS

500 32nd Street North Wisconsin Rapids, WI 54494

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **BACHELOR'S DEGREE OPTIONS**

**EARN A** 

American Public University System, Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, ,UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **RELATED PROGRAMS**

- Advanced Emergency Medical Technician
- Criminal Justice-Corrections & Community Advocacy
- Criminal Justice-Law Enforcement 720 Academy
- · Criminal Justice-Studies
- Emergency Medical Technician
- Emergency Services Management
- EMT-Paramedic
- · Paramedic Technician

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Fire Protection Technician graduate, to be able to:

- Demonstrate professional conduct by displaying personal code of ethics, positive work ethic, flexibility, teamwork skills, physical fitness, safe procedures, and sensitivity to diverse cultures and individuals.
- Perform fire prevention activities, including pre-planning, public education, inspection, and investigation.
- Apply incident management skills to emergency incidents.
- Meet professional fire and EMS credentialing standards.
- · Communicate clearly and effectively both verbally and through written documentation with clients, coworkers, other agencies, and supervisors.
- · Apply critical thinking skills to both emergency and non-emergency situations.

#### PROGRAM PROGRESSION

Students must receive a grade of "C" or better in each of the technical and general education courses in order to qualify for graduation.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a fire protection technician is available at mstc.edu/programs/fire-protection-technician. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

# STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### **GPS for Student Success** 10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies. and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing 10831103 ......3 credits

requirements at Mid-State.

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

10834109 .....3 credits Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and

proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and

subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10503142 10503143 10503153 10503191 10531940 10804107	Firefighting Principles  4 Building Construction for Fire Protection 3 Hazardous Materials Awareness & Operations  1 Principles of Emergency Services 2 EMT Foundations 3 College Mathematics  3
<b>Term</b> 10503112 10503192 10503195 10531941 10806134 10809198	Advanced Firefighting Practices Principles of Emergency Services Safety and Survival 3 Fire Behavior & Combustion 3 EMT Applications 2 General Chemistry 2 4 Intro to Psychology 2 3
<b>Term</b> 10503107 10503123 10503151 10801136 10809166	Firefighter Capstone 2 Occupational Safety and Health for the Emergency Services 3 Fire Prevention 4 English Composition 1 2 3 Intro to Ethics: Theory & Application 2 3
<b>Term</b> 10503108 10503111 10503156 10503193 10801196 10801198	Firefighter Health and Fitness 2 Driver/Operator - Pumper 2 3 Strategies, Tactics, & Incident Management 2 4 Fire Protection Systems 3 Oral/Interpersonal Communication 2 -or- Speech 2 3  Total credits 64

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

# **SAMPLE PART-TIME CURRICULUM OPTION**

<b>Term</b> 10503142 10503153 10531940	8 credits Firefighting Principles & 4 Hazardous Materials Awareness & Operations & 1 EMT Foundations 3
<b>Term</b> 10531941 10806134	6 credits EMT Applications 2 General Chemistry ☑ 4
<b>Term</b> 10503143 10503191 10804107	Building Construction for Fire Protection 3 Principles of Emergency Services 2 College Mathematics 2 3
<b>Term</b> 10503112 10503192 10809198	Advanced Firefighting Practices Principles of Emergency Services Safety and Survival 3 Intro to Psychology 2 3
<b>Term</b> 10503123 10801136 10809166	Occupational Safety & Health for the Emergency Services 3 English Composition 1 2 3 Intro to Ethics: Theory & Application 2 3
<b>Term</b> 10503156 10503195	7 credits Strategies, Tactics, and Incident Management
<b>Term</b> 10503107 10503151 10801196 10801198	Firefighter Capstone 2 Fire Prevention 4 Oral/Interpersonal Communication <b>**-or-</b> Speech <b>**</b> 3
<b>Term</b> 10503108 10503111 10503193	Firefighter Health and Fitness  Driver/Operator - Pumper 2 3  Fire Protection Systems 3
	Total credits 64

# **Advanced Firefighting Practices**

10503112 .....3 credits

Explores advanced firefighting skills, focusing on communications, investigations, and other advanced firefighting techniques. Fulfills the job performance requirements for Wisconsin Firefighter 2 certification eligibility. *Prerequisite: Fire Fighting Principles 10503142* 

# Building Construction for Fire Protection 10503143.....3 credits

Provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations, and operating at emergencies.

Prerequisite: Admission to Fire Protection Technician program 105032 or Emergency Services Management program 105035

# College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Driver/Operator - Pumper 🗹

10503111 ......3 credits

Provides instruction and opportunity to understand and put into practice basic defensive driving techniques. This course meets the requirements of NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional Qualifications, Driver/Operator - Pumper Job Performance Requirements (JPRs). Prerequisite: Firefighting Principles 10503142

### **EMT Applications**

10531941.....2 credits

Course covers the bulk of the Emergency Medical Technician certification course to include the handling of cervical and spine injuries, burn injuries, heart- and breathing-related problems, shock, and other trauma injuries. Includes several lab days to practice and perfect skills, clinical time, and extensive hands-on activities. Prepares students for national certification testing for EMT. To maintain National Registry certification eligibility this course must be finished the semester following the completion of EMT Foundations. *Prerequisite: EMT Foundations 10531940* 

#### **EMT Foundations**

10531940 .....3 credits

Covers the basics of the Emergency Medical Technician certification course to include CPR, airways, anatomy, hazmat response requirements, lifting and moving patients, incident command, and other technical information. It is the first part of a two-course system to prepare students for national certification testing for EMT.

Prerequisite: Admission to Emergency Medical Technician 305313 program

# English Composition 1 2

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Fire Behavior & Combustion

10503195.....3 credits

Explores the theories and fundamentals of how and why fires start, spread, and are controlled.

Prerequisite: Building Construction for Fire Protection 10503143 or Intro to Emergency Services 10503102

#### **Fire Prevention**

10503151 ...... 4 credits

Provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards, plans review, fire inspections, fire and life safety education, and fire investigation.

# Fire Protection Systems

10503193.....3 credits

Provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection, and portable fire extinguishers.

Prerequisite: Firefighting Principles 10503142

# **Firefighter Capstone**

10503107.....2 credits

Prepares the learner for a career in the fire service through an applied research project or an internship. Learners will apply for an internship if they are interested; however, final determination for acceptance into an internship is dependent on department acceptance of the learner. If an internship is not desired or not made available the learner will work with faculty to develop an applied research project.

Prerequisite: Firefighting Principles 10503142; Hazardous Materials Awareness & Operations 10503153

# Firefighter Health and Fitness

10503108 .....2 credits

Prepares the learner for the physical requirements that are necessary for success as a firefighter. Focuses on preparation for the Firefighter Candidate Physical Ability Test (CPAT). Learners will also explore the concepts of wellness in areas such as diet, stress management, and perspective.

# Firefighting Principles 🗷

10503142...... 4 credits

Describes basic fire behavior, techniques used to control structural and related fire emergencies, and life safety practices. Students perform all practical evolutions necessary to control and extinguish fires and otherwise meet all requirements for Firefighter I certification in the State of Wisconsin.

Prerequisite: Admission to Fire Protection Technician program 105032

# General Chemistry &

10806134 ...... 4 credits

Covers the fundamentals of chemistry. Topics include the metric system; problem solving; periodic relationships; chemical reactions, chemical equilibrium; properties of water; acids, bases, and salts; and gas laws. High School GPA of 3.0 or Accuplacer QAS of 246 or ACT of 19,or College Mathematics 10804107 with a "C" or better, or Intermediate Algebra with Applications 10804118 with a "C" or better. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Hazardous Materials Awareness & Operations ☐ 10503153.......1 credit

Examines characteristics relating to hazardous materials, including problems of recognition and mitigation. Prepares students to advance toward the Hazardous Materials Technician Level.

Corequisite: Fire Fighting Principles 10503142

# Intro to Ethics: Theory & Application © 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Psychology © 10809198

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an

aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Occupational Safety and Health for Emergency Services

10503123.....3 credits

Introduces the basic concepts of occupational health and safety as it relates to emergency services organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations. *Prerequisite: Intro to Emergency Services 10503102* 

# Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Principles of Emergency Services © 10503191 ......2 credits

Introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasizes fire and emergency service, ethics, and leadership from the perspective of the company officer. *Prerequisite: Admission to Fire Protection Technician program* 105032

# Principles of Emergency Services Safety and Survival 10503192......3 credits

Introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

Prerequisite: Admission to Fire Protection Technician program 105032

# Speech ☑

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

# Strategies, Tactics, & Incident Management © 10503156.......4 credits

Provides the principles of fire ground control through use of personnel, equipment, and extinguishing agents.

Prerequisite: Firefighting Principles 10503142 or Intro to Emergency Services 10503102



# FIREFIGHTER TECHNICIAN

Technical Diploma
Program Code: 31-503-1
Total Credits: 27

The Firefighter Technician program teaches the entry-level fire behavior and techniques needed to control structural and related fire emergencies as well as life safety practices. Graduates have the option to continue in the Fire Protection Technician associate degree program.

You will gain knowledge and skills in the areas of fire suppression, rescue, truck and pump operation, and performance of fire inspections. You will also be exposed to realistic simulations—inside and outside the classroom—and train on Mid-State's state-of-the-art burn tower, fire engines, and other high-tech equipment. Developed in partnership with local fire departments, this program ensures you have a competitive edge when starting your career.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

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- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where:

When:

With:

- Official Transcripts
   Mid-State Technical College
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   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive

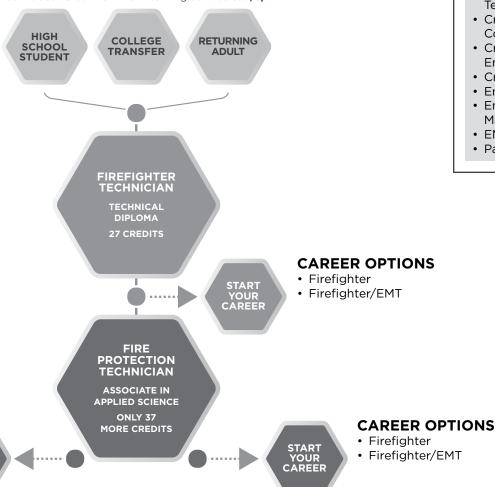
1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

500 32nd Street North Wisconsin Rapids, WI 54494

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College Credit • Dual Credit
Military Experience • Work Experience

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### **BACHELOR'S DEGREE OPTIONS**

**EARN A** 

American Public University System, Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

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Page 2

OTHER OPTIONS

**RELATED PROGRAMS** 

· Criminal Justice-Law

Emergency Services Management
EMT-Paramedic
Paramedic Technician

Technician

• Advanced Emergency Medical

 Criminal Justice-Corrections & Community Advocacy

Enforcement 720 AcademyCriminal Justice-StudiesEmergency Medical Technician

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Firefighter Technician graduate, to be able to:

- Demonstrate professional conduct.
- · Perform fire prevention activities.
- Apply incident management and mitigation skills to emergency incidents.
- Meet professional fire and EMS credentialing standards.
- · Communicate clearly and effectively.
- Apply critical thinking skills to both emergency and non-emergency situations.

### **TECHNICAL SKILLS ATTAINMENT**

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#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success ☐ 10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing 10831103 ......3 credits

requirements at Mid-State.

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and

statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786

of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# SAMPLE FULL-TIME CURRICULUM OPTION

Term	14 credits
10503142	Firefighting Principles <b>2</b> 4
10503151	Fire Prevention 4
10503191	Principles of Emergency Services 2
10503153	Hazardous Materials Awareness & Operations 🗹 1
10531940	EMT Foundations 3
Term	13 credits
10503108	Firefighter Health and Fitness 2
10503111	Driver/Operator - Pumper 🗹 3
10503112	Advanced Firefighting Practices 3
10503192	Principles of Emergency Services Safety
	and Survival 3
10531941	EMT Applications 2
	•
	Total credits 27

☑ This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

# **SAMPLE PART-TIME CURRICULUM OPTION**

<b>Term</b> 10503142 10503153 10531940	Firefighting Principles & Hazardous Materials Awareness & Ope EMT Foundations	8 credits 4 erations 2 1 3
<b>Term</b> 10503112 10531941	Advanced Firefighting Practices EMT Applications	5 credits 3 2
<b>Term</b> 10503151 10503191	Fire Prevention Principles of Emergency Services	6 credits 4 2
<b>Term</b> 10503108 10503111 10503192	Firefighter Health and Fitness Driver/Operator - Pumper & Principles of Emergency Services Sa and Survival	8 credits
	Total o	credits 27

# **Advanced Firefighting Practices**

10503112 .....3 credits

Explores advanced firefighting skills, focusing on communications, investigations, and other advanced firefighting techniques. Fulfills the job performance requirements for Wisconsin Firefighter 2 certification eligibility. *Prerequisite: Fire Fighting Principles 10503142* 

# Driver/Operator - Pumper 🗈

10503111 .....3 credits

Provides instruction and opportunity to understand and put into practice basic defensive driving techniques. This course meets the requirements of NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional Qualifications, Driver/Operator - Pumper Job Performance Requirements (JPRs). Prerequisite: Firefighting Principles 10503142

### **EMT Applications**

10531941.....2 credits

Course covers the bulk of the Emergency Medical Technician certification course to include the handling of cervical and spine injuries, burn injuries, heart- and breathing-related problems, shock, and other trauma injuries. Includes several lab days to practice and perfect skills, clinical time, and extensive hands-on activities. Prepares students for national certification testing for EMT. To maintain National Registry certification eligibility this course must be finished the semester following the completion of EMT Foundations. *Prerequisite: EMT Foundations 10531940* 

# **EMT Foundations**

10531940 .....3 credits

Covers the basics of the Emergency Medical Technician certification course to include CPR, airways, anatomy, hazmat response requirements, lifting and moving patients, incident command, and other technical information. It is the first part of a two-course system to prepare students for national certification testing for EMT.

Prerequisite: Admission to Emergency Medical Technician 305313 program

### Fire Prevention

10503151 ...... 4 credits

Provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards, plans review, fire inspections, fire and life safety education, and fire investigation.

# Firefighter Health and Fitness

10503108 ......2 credits

Prepares the learner for the physical requirements that are necessary for success as a firefighter. Focuses on preparation for the Firefighter Candidate Physical Ability Test (CPAT). Learners will also explore the concepts of wellness in areas such as diet, stress management, and perspective.

# Firefighting Principles &

10503142...... 4 credits

Describes basic fire behavior, techniques used to control structural and related fire emergencies, and life safety practices. Students perform all practical evolutions necessary to control and extinguish fires and otherwise meet all requirements for Firefighter I certification in the State of Wisconsin.

Prerequisite: Admission to Fire Protection Technician program 105032

# Hazardous Materials Awareness & Operations ☐ 10503153.......1 credit

Examines characteristics relating to hazardous materials, including problems of recognition and mitigation. Prepares students to advance toward the Hazardous Materials Technician Level.

Corequisite: Fire Fighting Principles 10503142

# Principles of Emergency Services

Introduces the student to the organization and managemen of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasizes fire and emergency service, ethics, and leadership from the perspective of the company officer. *Prerequisite: Admission to Fire Protection Technician program* 105032

# Principles of Emergency Services Safety and Survival 10503192......3 credits

Introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

Prerequisite: Admission to Fire Protection Technician program 105032



# **HEALTH & WELLNESS PROMOTION**

Associate in Applied Science (AAS) Program Code: 10-546-2 **Total Credits: 60-61** 

Mid-State's Health & Wellness Promotion graduates possess a strong foundation in health and wellness concepts across the lifespan. They have the knowledge and skills needed to develop and implement health and wellness promotion activities that seek to maximize quality of life and reduce or prevent illness and injury. The program will prepare you to support individuals, organizations, and communities with health and wellness initiatives. You will also learn to design, develop, and promote wellness programs and initiatives through a variety of educational campaigns, promotion concepts, and modification interventions. Mid-State is the only college in the Wisconsin Technical College System to offer this online program.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- ☐ Criminal Background Statement of Understanding and Release of Information Form

Other:			

mstc.edu 888.575.6782 TTY: 711





STEVENS POINT CAMPUS WISCONSIN RAPIDS CAMPUS 1001 Centerpoint Drive

Stevens Point, WI 54481

500 32nd Street North

ADAMS CAMPUS 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

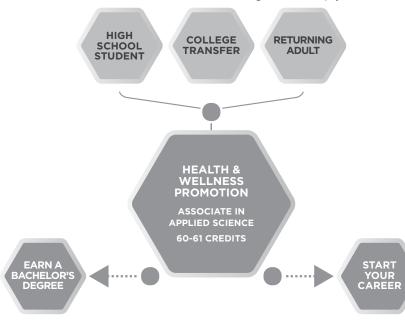
Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **OTHER OPTIONS**

### **RELATED PROGRAMS**

- Central Service Technician
- Health Information Management
- Medical Assistant
- Medical Coder
- Nursing
- Nursing Assistant
- Pharmacy Services Management
- Pharmacy Technician
- Phlebotomy Technician
- Respiratory Therapy
- Surgical Technologist

### **CAREER OPTIONS**

- Community Health Advocate
- Health Promotion Coordinator
- Wellness Coach

# **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Health & Wellness Promotion graduate, to be able to:

- Provide evidence-based health and wellness direction to individuals and organizations.
- Design, develop, and implement health and wellness promotion activities and campaigns.
- Champion behavior modification interventions to promote sustainable health and wellness.
- Support the maintenance of health and wellness promotion for individuals and organizations.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in Program Development, Implementation, & Evaluation; Health Coaching for the Wellness Professional; Population Health & Wellness; and Health & Wellness Practicum.

### **ADDITIONAL ENTRY CRITERIA**

To apply to the Health & Wellness Promotion program, please submit the following documents to Mid-State Admissions:

 Criminal Background Statement of Understanding and Release of Information form.

Mid-State Technical College • Admissions 500 32nd Street North Wisconsin Rapids, WI 54494

### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a Health and Wellness Promotion graduate is available at **mstc.edu/programs/health-wellness-promotion**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

### PRACTICUM-RELATED REQUIREMENTS

Prior to placement at a practicum site, students need to pay for a criminal background check and provide documentation of required health work.

Students are responsible for ensuring all requirements remain current during program enrollment.

Practicum sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete practicum courses. Mid-State will make two attempts to place a student in an appropriate practicum experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the practicum course and will not be able to advance in the program.

#### PROGRAM PROGRESSION AND COMPLETION

In order to maintain a passing status and progress in the program, students must:

- Repeat courses not completed with a "C" or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of "C" or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability of courses. Students may be required to apply for program re-entry in order to repeat courses within the program's instructional area.

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### GRADUATION REQUIREMENT

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success ©

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

10838104 .....2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### Pre-Algebra

# 10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10544103 10546100 10801136 10809196 10809198	Healthy Aging & Essential Concepts for Health and Wellness English Composition 1 & Intro to Sociology & Intro to Psychology &	its 3 3 3 3 3
<b>Term</b> 10546101 10546102 10546108 10801196 10806177 10806189	Nutrition for Healthy Living Behavior Change for Wellness Group Fitness Instruction © Oral/Interpersonal Communication © -or- Speech © General Anatomy & Physiology © -or- Basic Anatomy	its 3 3 3 4 3 4 3
<b>Term</b> 10102101 10546103 10546104 10546109 10546110	Intro to Business & Principles of Physical Conditioning & Population Health & Wellness Youth Wellness & Mental Wellness and Stress Management	its 3 3 3 3 3 3
<b>Term</b> 10103123 10546107 10546105 10546106 10546111 10809166 10809172	Excel-Beginning  Health Coaching for the Wellness Professional  Program Development, Implementation, & Evaluation Health & Wellness Practicum  Wellness Marketing and Entrepreneurship Intro to Ethics: Theory and Application  Introduction to Diversity Studies	1 3 3 2 3
	Total credits 60-	-61

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

## **SAMPLE PART-TIME CURRICULUM OPTION**

<b>Term</b> 10546100 10801136	•	: <b>s</b> 3 3
<b>Term</b> 10809166 10809172 10809198	6 credit Intro to Ethics: Theory and Application & -or- Introduction to Diversity Studies & Intro to Psychology &	3 3
<b>Term</b> 10546101 10801196 10801198 10809196	Oral/Interpersonal Communication & -or- Speech &	3 3 3
<b>Term</b> 10103123 10806177	concrair, materily at the concess at	: <b>s</b> 1 4
10806189 10544103		3 3
<b>Term</b> 10102101 10546103 10546108	Principles of Physical Conditioning	3 3 3
<b>Term</b> 10546102 10546111	6 credit Behavior Change for Wellness Wellness Marketing and Entrepreneurship	: <b>s</b> 3 3
<b>Term</b> 10546109 10546110 10546104	Mental Wellness and Stress Management	3 3 3
<b>Term</b> 10546107 10546105 10546106	Program Development, Implementation, & Evaluation	3 3 2
	Total credits 60-6	1

# **Basic Anatomy**

10806189 .....3 credits

Examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems.

### **Behavior Change for Wellness** 10546102 ......3 credits

Examines the importance of understanding the theory of behavior change to assist others in overcoming barriers so they may achieve sustainable behavior change. Refines a beginning skill set including how to advise individuals on goal setting, strategy planning, and encouraging maintenance of health and wellness goals. Coreguisite: Essential Concepts for Health and Wellness 10546100

# English Composition 1 &

10801136 ......3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

### **Essential Concepts for Health and Wellness** 10546100 ......3 credits

This class introduces the student to basic health and wellness promotion principles at the individual level including the six dimensions of wellness, determinants of health and behavior change theory. Students explore a holistic view of health and wellness concepts covering healthy lifestyle choices, managing stress, individual wellness perspective and how economics can positively and negatively impact the health and wellness of an individual.

### Excel Beginning &

10103123......1 credit

Students learn to create, modify, and format spreadsheets, charts, and graphics. Students also learn to perform calculations and analysis on data.

# General Anatomy & Physiology &

10806177...... 4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236 or ACT of 15, or General Chemistry 10806134 with a grade of "C" or better, or General Biology 10806114 with a grade of "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **Group Fitness Instruction** <a href="#"> </a> 10546108 .....3 credits

Provides theoretical knowledge and practical skills in preparation for a national certification exam in group fitness instruction. Topics include guidelines for instructing safe, effective, and purposeful exercise, essentials of the instructor-participant relationship, principles of motivation to encourage adherence in the group fitness setting, effective instructor-to-participant communication techniques, methods for enhancing group leadership, and the group fitness instructor's (GFI's) professional role.

## Health & Wellness Practicum & 10546106 ......2 credits

Provides practical experience and the opportunity to apply concepts from previous coursework to help students transition to the role of community health promoter. The practicum location is chosen in collaboration with faculty based on student interest and site availability. Students work closely with an approved preceptor and faculty to accomplish individualized learning goals.

Prerequisites: Essential Concepts for Health & Wellness 10546100, Behavior Change for Wellness 10546102. Principles of Physical Conditioning 10546103, and Nutrition for Healthy Living 10546101; Corequisites: Population Health & Wellness 10546104 and Program Development, Implementation & Evaluation 10546105

### Health Coaching for the Wellness Professional & 10546107.....3 credits

Builds on the Behavior Change for Wellness class to introduce and practice techniques for lifestyle health coaching. Analyzes the relationships between exercise, nutrition, and weight control and how to effectively and sustainably promote lifelong positive behavior change in individual clients.

Prerequisites: Behavior Change for Wellness 10546102 and Principles of Physical Conditioning 10546103

# **Healthy Aging**

10544103 ......3 credits

Provides an overview of practices to promote healthy aging. Addresses nutrition, physical activity, and prevention practices as well as medications commonly prescribed for the older adult. Emphasis is on practices to address current aging trends.

# Intro to Business 🗷

10102101.....3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

# Intro to Ethics: Theory & Application & 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Psychology 🗷

10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Sociology &

10809196 ......3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Introduction to Diversity Studies & 10809172......3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Mental Wellness and Stress Management 10546110 ......3 credits

Investigate the underpinnings of mental health and wellness. Explore the risks of stress and emotional management techniques to mitigate these risks by embracing a growth mindset. The learner will be engaged in processes to support the emotional dimension of health and demonstrate ways to implement these practices for oneself and others along their wellness journey.

# Nutrition for Healthy Living 10546101.....3 credits

Students learn concepts of healthy eating to facilitate the journey of good health across the lifespan. Healthy eating concepts focus on individual decision making and behavior change with sustainable interventions rooted in evidenced-based practice. Students investigate nutrition myth versus

nutritional choice.

Coreguisite: Essential Concepts of Health and Wellness 10546100

fact and explore how policy and environment impact

# Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Population Health & Wellness 10546104 ......3 credits

Examines the components and attributes of population health, including economic and policy implications for population-based health promotion activities. Students

take a closer look at measures including interventions and programming that support the health of the community. Corequisite: Essential Concepts of Health and Wellness 10546100

# Principles of Physical Conditioning © 10546103 ......3 credits

Emphasizes quality of life improvement and encouraging others to maximize health and wellness potential through physical conditioning. Explores the effects of physical exercise on body systems and functioning, including specific exercises for balance, endurance, strength, and weight loss. Special populations and considerations are highlighted throughout the course.

Corequisite: Basic Anatomy 108061890

# Program Development, Implementation, & Evaluation 10546105 ......3 credits

Students acquire the skill set to develop, implement, and evaluate a health and wellness promotion project at the individual or community level. Explores components of health and wellness promotion program building, including the needs assessment, marketing principles, role of leadership, continuous quality improvement, economics, and collaborations to ensure success.

Prerequisites: Essential Concepts for Health & Wellness 10546100, Behavior Change for Wellness 10546102, Principles of Physical Conditioning 10546103, and Nutrition for Healthy Living 10546101; Corequisite: Population Health & Wellness 10546104

# Speech 🗷

# 10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Wellness Marketing and Entrepreneurship 10546111 ......3 credits

Explore ways to support entrepreneurship strategies in the wellness market. Learners will investigate way to market themselves as emerging wellness professionals, find their niche market and use social media to attract clients all while exploring the basics of wellness business building. The learner will create a digital platform and a business plan geared toward their unique future wellness professional interests.

# Youth Wellness &

### 10546109 ......3 credits

Explore the developmental science which shapes youth wellness as seen through the lens of each of the wellness dimensions. Examining different socioeconomic implications and childhood events will support evidence based resiliency interventions. An exploration of youth community programming and application exercises will support the learner's transition to the health and wellness professional role.



# HEALTH INFORMATION MANAGEMENT

# Associate in Applied Science (AAS) Program Code: 10-530-4 Total Credits: 61-62

Mid-State's Health Information Management program prepares individuals to enter the emerging field of electronic health record management. Students learn to use computer programs and established methods to securely process, compile, maintain, and report electronic health information data for patient care. In this program you'll learn to abstract and code clinical data using classifications systems as well as analyze health records according to industry protocols. You'll build knowledge about reimbursement, facility planning, marketing, risk management, and more. Graduates are eligible to take the AHIMA national certification exam for Registered Health Information Technician (RHIT).

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Criminal Background Statement of Understanding and Release of Information Form

Other:			

mstc.edu 888.575.6782 TTY: 711





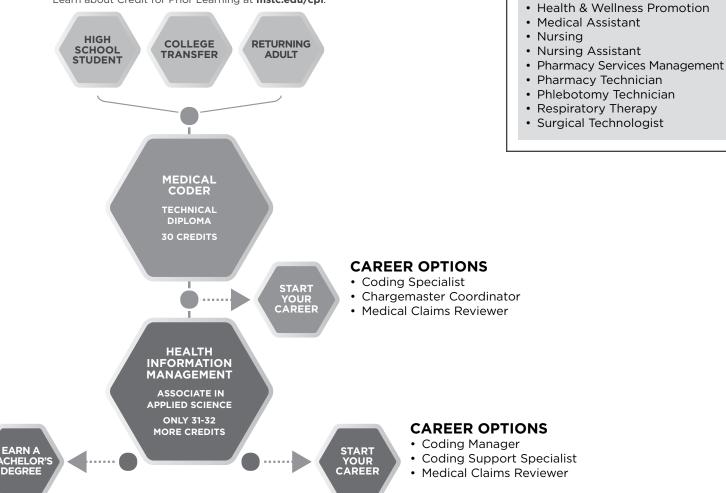
ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

Wisconsin Rapids, WI 54494

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), The College of St. Scholastica, University of Phoenix, UW-Green Bay, UW-La Crosse, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

OTHER OPTIONS

**RELATED PROGRAMS** 

• Central Service Technician

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Health Information Management graduate, to be able to:

- Demonstrate professional behaviors and ethics.
- Apply information technology and analytics in data use.
- · Apply coding and reimbursement systems.
- Supervise various components of the health information system.
- Apply data governance principles to ensure the quality of health data.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program and will complete a mock RHIT exam to fulfill the TSA requirement for this program.

The Health Information Management accreditor of Mid-State Technical College is the Commission on Accreditation for Health Informatics and Information Management (CAHIIM). The College's accreditation for associate degree in Health Information Management at the Marshfield campus has been reaffirmed through 2023.

Graduates are eligible to take the national certification exam offered by the American Health Information Management Association (AHIMA) for the Registered Health Information Technician (RHIT) credential.



#### ADDITIONAL ENTRY CRITERIA

To apply to the Health Information Management program, please submit the following documents to Mid-State Admissions:

 Criminal Background Statement of Understanding and Release of Information form.

Mid-State Technical College • Admissions 500 32nd Street North Wisconsin Rapids, WI 54494

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a Health Information Management graduate is available at **mstc.edu/programs/health-information-management**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

### PRACTICUM-RELATED REQUIREMENTS

Prior to placement at a practicum site, students need to pay for a criminal background check through a private vendor and provide documentation of required health work.

Students are responsible for ensuring all requirements remain current during program enrollment.

Practicum sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete practicum courses. Mid-State will make two attempts to place a student in an appropriate practicum experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the practicum course and will not be able to advance in the program.

## PROGRAM PROGRESSION AND COMPLETION

In order to progress in and successfully complete the program, students must:

- Repeat courses not completed with a "C" or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of "C" or better in all courses required for graduation.

A student may repeat the same course only once in the Health Information Management program. If the course is failed a second time, the student will be withdrawn from the Health Information Management program. If a Health Information Management student fails four separate program courses, the student will be withdrawn from the program. Failures will include failing the same course or failing different courses. A withdrawal grade of "W" counts as one attempt for the course.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

GRADUATION REQUIREMENT The GPS for Student Success course is required for all Mid-State program students and is recommended to be	NOTES:		
completed before obtaining 12 credits. (Not counted in			
the total credit value for this program.) Some students are exempt from this requirement. Please see your program			
advisor for more information.			
GPS for Student Success <b>☞</b> 108901021 credit			
Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for			
success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes.  This course must be completed prior to obtaining 12 credits			
and is a graduation requirement.			
ADDITIONAL COURSES AS NEEDED  The following courses may be recommended or required if			
the student does not achieve minimum Accuplacer scores.			
Intro to College Reading			
<b>108381042 credits</b> Provides learners with the opportunities to develop			
and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to			
academic tasks and read to acquire information from a			
variety of sources.			
Intro to College Writing			
108311033 credits Introduces basic principles of composition, including organization, development, unity, and coherence in			
paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into			
required program courses. This course is tuition bearing and			
under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion			
requirements at Mid-State.  Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent.			
Proficiency in word processing skills recommended.			
Pre-Algebra 108341093 credits			
Provides an introduction to algebra. Includes operations			
on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and			
statistics. Prepares students for elementary algebra and subsequent algebra-related courses.			
Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786			
with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)			

# **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10103106 10501101 10530123 10530125 10806177	Microsoft Office-Introduction & Medical Terminology & Introduction to Digital Information in Healthcare Organization of Healthcare General Anatomy & Physiology & -or-	3 3 3 2 4		
10806189	Basic Anatomy	3		
<b>Term</b> 10103124 10530144 10530161 10530182 10530197 10801136	Excel Intermediate  CPT Coding Legal Aspects of HIM Human Disease for the Health Professions ICD Diagnosis Coding English Composition 1  C	1 3 2 3 3 3		
Term 10530132 10530160 10804198 10801196 10801198 10809188 10809198	Health Data Analysis Performance Improvement for Health Professions Introductory Statistics & Oral/Interpersonal Communication & -or- Speech & Developmental Psychology & -or- Intro to Psychology &	3 3 3 3 3 3 3		
<b>Term</b> 10530146 10530147 10530164 10530165 10530166 10530167 10809172	Private and Government Reimbursement HIM Advanced Coding RHIT Test Prep Health Information Practicum Inpatient Procedure Coding Management of Health Information Services Introduction to Diversity Studies &	3 3 1 1 3 3 3 3		
Total credits 61-62				

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

# **SAMPLE PART-TIME CURRICULUM OPTION**

Term	9-10 credits
10501101 10530123	Medical Terminology <b>2</b> 3 Introduction to Digital Information
10806177	in Healthcare 3 General Anatomy & Physiology 2 4 -or-
10806189	Basic Anatomy 3
<b>Term</b> 10530161 10530182	Legal Aspects of HIM 2 Human Disease for the Health Professions 3
<b>Term</b> 10103106 10530125 10530197	Microsoft Office-Introduction 2 3 Organization of Healthcare 2 ICD Diagnosis Coding 3
<b>Term</b> 10103124 10530144 10801136	Excel Intermediate 2 1 CPT Coding 3 English Composition 12 3
<b>Term</b> 10530132 10804198	Health Data Analysis 3 Introductory Statistics 2 3
<b>Term</b> 10530146 10530147 10530166	Private and Government Reimbursement 3 HIM Advanced Coding 3 Inpatient Procedure Coding 3
<b>Term</b> 10530160	9 credits Performance Improvement for
10801196 10801198 10809188	Health Professions  Oral/Interpersonal Communication  -or- Speech  - 3  Developmental Psychology  -or-
10809198	Intro to Psychology 2 3
<b>Term</b> 10530164 10530165 10530167 10809172	RHIT Test Prep 1 Health Information Practicum 1 Management of Health Information Services 3 Introduction to Diversity Studies 2
	Total credits 61-62

### **Basic Anatomy**

10806189 ......3 credits

Examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236 or ACT of 15. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **CPT Coding**

10530144 ......3 credits

Prepares learners to assign current procedural terminology (CPT) codes supported by medical documentation with entry-level proficiency. Students are familiar with and use standard coding references. Emphasizes accuracy, CPT instructional notations, conventions, rules, and official coding guidelines when assigning CPT codes to case studies and actual medical record documentation. Also covers application of modifiers to services and relationship to financial impact.

Prerequisites: Medical Terminology 10501101, Basic Anatomy 10806189, and Introduction to Digital Information in Healthcare 10530123; Corequisite: Human Disease for the Health Professions 10530182

# 

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# English Composition 1 2

10801136 ......3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

### Excel-Intermediate 🗷

10103124 ......1 credit

Students learn to summarize and analyze large data sets. Some of Excel's data tools and what-if tools are applied. Prerequisite: Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123

# General Anatomy & Physiology 🗷

10806177...... 4 credits

Examines concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to inform decision making and professional communication with colleagues and patients. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, or ACT of 15, or General Chemistry 10806134, or General Biology 10806114, or Human Body in Health & Disease 1050910 with a grade of "C" or better.

# Health Data Analysis

10530132.....3 credits

Focuses on the collection, computation, analysis, and presentation of healthcare statistical data. Examines data analytics, registries, vital statistics, mandatory reporting, and research.

Prerequisites: Introduction to Digital Information in Healthcare 10530123 and Excel Intermediate 10103124

## **Health Information Practicum**

10530165.....1 credit

Provides a blend of supervised clinical experience in a health-care facility with online classroom activities. Students apply skills and knowledge gained from previous courses in the health information management setting. Classroom activity includes discussion of practicum experience, resume preparedness, and project portfolio.

Prerequisites: Health Data Analysis 10530132, Performance Improvement for Health Professions 10530160, Legal Aspects of HIM 10530161, Inpatient Procedure Coding 10530166. Corequisites: Private & Government Reimbursement 10530146, HIM Advanced Coding 10530147.

# **HIM Advanced Coding**

10530147.....3 credits

Builds on basic coding knowledge and skills through the coding of clinical case studies and actual medical records. Students access, review, and code electronic medical records from the virtual lab software; perform data quality reviews to validate code assignment and compliance with reporting requirements; develop appropriate physician queries; and assign diagnosis related groups (DRGs) and ambulatory payment classifications (APCs) with entry-level proficiency using computerized encoding and grouping software.

Prerequisites: ICD Diagnosis Coding 10530197 and CPT Coding 10530144; Corequisites: Private and Government Reimbursement 10530146 and Inpatient Procedure Coding 10530166

# Human Disease for the Health Professions 10530182.....3 credits

Focuses on the common diseases of each body system as encountered in all types of healthcare settings by health information professionals. Emphasizes understanding the etiology (causes), signs and symptoms, diagnostic tests, and treatment (including pharmacologic) of each disease. *Prerequisites: Medical Terminology 10501101 and Basic Anatomy 10806189* 

# ICD Diagnosis Coding

10530197.....3 credits

Prepares students to assign ICD diagnosis codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation.

Prerequisites: Medical Terminology 10501101, Basic Anatomy 10806189, and Introduction to Digital Information in Healthcare 10530123; Corequisite: Human Disease for the Health Professions 10530182

# **Inpatient Procedure Coding**

10530166.....3 credits

Prepares students to assign ICD procedure codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD procedure codes to case studies and actual medical record documentation.

Prerequisite: ICD Diagnosis Coding 10530197; Corequisites: Private and Government Reimbursement 10530146 and HIM Advanced Coding 10530147

# Intro to Psychology ©

10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Introduction to Digital Information in Healthcare 10530123......3 credits

This introductory course examines the field of Health Information Management including the hardware and software systems used, common industry terminology, the security and ethical responsibilities of professionals in the field, and the current trends in the industry. Students will focus on accuracy and integrity of health data and confidentiality in this course.

Corequisite: 10501101 Medical Terminology

# Introduction to Diversity Studies 🗈

10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Introductory Statistics &

10804189 .....3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Legal Aspects of HIM**

10530161 ......2 credits

Focuses on regulations for the content, access, disclosure, privacy, confidentiality, security, retention, and destruction of health information. Includes an overview of the US legal system.

Prerequisite: Introduction to Digital Information in Healthcare 10530123

# Management of Health Information Services 10530167.....3 credits

Examines the principles of management to include planning, organizing, human resource management, directing, and controlling as related to the health information department. *Prerequisites: Organization of Healthcare 10530125, Legal Aspects of HIM 10530161, Health Data Analysis 10530132, and Performance Improvement for Health Professions 10530160* 

# **Medical Terminology** <a>☑</a>

10501101...... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Learners practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

## Microsoft Office-Introduction & 10103106 ......3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse, and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

### Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Organization of Healthcare

10530125.....2 credits

Examines the organization and delivery of healthcare services, external standards, regulations, initiatives, payment and reimbursement systems, and healthcare providers and disciplines.

# **Performance Improvement for Health Professions** 10530160 .....3 credits

Examines healthcare performance improvement systems. Includes performance assessment, measurement, and improvement as well as patient safety, risk management, utilization management, and medical staff credentialing. Prerequisites: Introduction to Digital Information in Healthcare 10530123 and Excel Intermediate 10103124

## **Private and Government Reimbursement** 10530146 ......3 credits

Introduces students to the vocabulary of private healthcare and government reimbursement. Students will identify and compare the varieties of private and government healthcare insurance including the advantages and disadvantages of each for the provider and for the policyholder, HIPAA guidelines are utilized throughout.

Prerequisites: ICD Diagnosis Coding 10530197 and CPT Coding 10530144; Corequisites: Inpatient Procedure Coding 10530166; HIM Advanced Coding 10530147

# **RHIT Test Prep**

10530164 ......1 credit

Explores strategies for preparing for the Registered Health Information Technician (RHIT) examination, including study skills, test-preparation skills, and test-taking skills. Includes a basic review of content related to the examination. Prerequisites: Health Data Analysis 10530132, Performance Improvement for Health Professions 10530160, and Legal Aspects of HIM 10530161; Corequisites: Private and Government Reimbursement 10530146, HIM Advanced Coding 10530147, and Inpatient Procedure Coding 10530166

# Speech 2

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.



# HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) INSTALLER

**Technical Diploma** 

Program Code: 30-401-4

**Total Credits: 25** 

Mid-State's Heating, Ventilation, and Air Conditioning (HVAC) Installer program provides the hands-on foundation needed for an entry-level position in the heating, ventilation, air conditioning (HVAC) fields. Graduates will understand the various components of heating, ventilation, air-conditioning, and refrigeration systems, including furnaces, ductwork, boilers, hydronic piping, HRVs (heat recovery ventilators), evaporators, condensers, circuits, and controls. Students will also explore geothermal, biomass, and solar heating systems. Through hands-on classroom lab activities, students will join various piping types, design and construct ductwork, and install a complete residential HVAC system. They will also learn the electrical skills necessary to read wiring diagrams and troubleshoot mechanical control systems. Graduates are prepared to take the EPA 608 Technician Certification exam for refrigerants.

Estimated tuition and fees: mstc.edu/programcosts

### ACADEMIC ADVISOR

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





**ADAMS CAMPUS** 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481

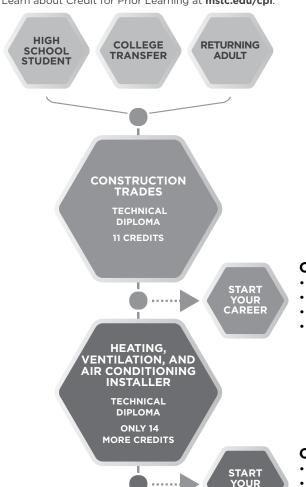
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Wisconsin Rapids, WI 54494

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

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#### **OTHER OPTIONS**

# APPRENTICESHIP OPPORTUNITIES

- Carpenter Apprenticeship
- Construction Electrician (ABC) Apprenticeship
- Construction Electrician (IBEW-NECA) Apprenticeship
- Plumber Apprenticeship
- Steamfitter and Steamfitter Service Apprenticeship

### **CAREER OPTIONS**

- Electrical Contracting Laborer
- Carpentry Contracting Laborer
- Plumbing Contracting Laborer
- Apprenticeship

#### **CAREER OPTIONS**

- Building Controls Technician
- Heating, Ventilation, and Air Conditioning Installer
- Heating and Air Conditioning Mechanic
- Apprenticeship

#### **CAREER OPTIONS**

- Energy Load Estimator
- Renewable Energy Technical Sales Representative
- Solar Installer
- Apprenticeship

#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

YOUR

CAREER

For more information and additional opportunities, visit mstc.edu/transfer.

RENEWABLE ENERGY TECHNICIAN ASSOCIATE IN APPLIED SCIENCE ONLY 36

MORE CREDITS

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Heating, Ventilation, and Air Conditioning (HVAC) Installer graduate, to be able to:

- Maintain a safe and professional work environment when installing HVAC equipment.
- Plan the installation of a gas-fired furnace with a central air conditioning system.
- · Install forced air ductwork.
- · Commission an HVAC system.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Intro to HVAC Installation course.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success & 10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing 10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### **Pre-Algebra**

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

Term	13 cre	dits
10442117	Welding Fundamentals 1 🗹	1
10476171	Safety for Construction Trades 🗹	1
10482107	Construction Fundamentals	2
10483121	Piping Applications	3
10601110	HVAC Heating Fundamentals	2
10601130	Blueprint Reading for Construction Trades	2
10601140	Electricity for the Construction Trades	2
Term	12 cre	dits
<b>Term</b> 10483102	12 cree Electrical Components & Control Circuits	dits 2
	5.5	
10483102	Electrical Components & Control Circuits	2
10483102 10483113	Electrical Components & Control Circuits Hydronics and Heat Pumps	2
10483102 10483113 10483115	Electrical Components & Control Circuits Hydronics and Heat Pumps Energy Load Estimation and Modeling	2 3 3
10483102 10483113 10483115 10601120	Electrical Components & Control Circuits Hydronics and Heat Pumps Energy Load Estimation and Modeling HVAC Air Conditioning Fundamentals	2 3 3 2
10483102 10483113 10483115 10601120	Electrical Components & Control Circuits Hydronics and Heat Pumps Energy Load Estimation and Modeling HVAC Air Conditioning Fundamentals	2 3 3 2 2

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10442117 10483121 10601110 10601140	Welding Fundamentals 1 & Piping Applications HVAC Heating Fundamentals Electricity for the Construction Trades	edits 1 3 2 2
<b>Term</b> 10476171 10482107 10601120	Safety for Construction Trades & Construction Fundamentals HVAC Air Conditioning Fundamentals	2 2
<b>Term</b> 10483115 10601130	<b>5 cre</b> Energy Load Estimation and Modeling Blueprint Reading for Construction Trades	edits 3 2
<b>Term</b> 10483102 10483113 10601121	<b>7 cre</b> Electrical Components & Control Circuits Hydronics and Heat Pumps Intro to HVAC Installation	2 3 2
	Total credit	s 25

NOTES:		

### **Blueprint Reading for Construction Trades** 10601130 ......2 credits

Develops the ability to read blueprints for commercial and non-commercial structures. Emphasizes blueprints drawn by licensed architects, covering plumbing, electrical wiring, structural framing, millwork, interior and exterior details, and basic information.

### **Construction Fundamentals**

10482107.....2 credits

Studies the concepts associated with the theory, materials, and methods used in construction, including footings and foundations, walls, floors, roofs and roof materials, exterior finishes, interior walls, ceiling and floor finishes, insulation types, vapor and air infiltration, and sound protection. Students also become familiar with blueprint reading and examine all trades associated with construction, including, electrical, HVAC, and plumbing. Safe use of the appropriate tools for each trade is covered.

#### **Electrical Components & Control Circuits** 10482103.....2 credits

Topics include a review of AC/DC electricity fundamentals and the physical laws that apply to electronic circuits. Direct current (DC) covers basic definitions of voltage, current, and resistance and analysis of series and parallel resistive circuits. Alternating current (AC) includes an introduction to AC generation, capacitors, inductors, and transformers and their applications in electronic circuits. Additional topics include control circuits, symbols, diagrams, protection devices, relays, thermostats, single-phase motors, control components, and troubleshooting ACR system wiring diagrams. Prerequisite: Electrical Circuits I 10605105 or Intro to Electronics 10605108 or Electricity for the Construction Trades 10601140

### **Electricity for the Construction Trades** 10601140.....2 credits

This course is an introduction to electrical theory and application for those in the construction and building trades. Content includes AC and DC circuits, schematics, Ohms law, multimeter use and circuit troubleshooting. This course will also provide an introduction to the contents of the National Electric Code (NEC).

#### **Energy Load Estimation and Modeling** 10483115......3 credits

In this course students will develop the skills to do residential and light commercial energy load estimations. Students will calculate heating and cooling building loads and estimate energy consumption rates and quantities. The student will also estimate energy upgrades such as insulation, window improvements, etc. and calculating payback and fuel savings. The course covers a variety of computer programs available for analyzing buildings.

### **HVAC Air Conditioning Fundamentals** 10601120 ......2 credits

Topics include air conditioning principles and terms, physical principles of air movement, air filtering and humidity, and methods of conditioning air for comfort and health. Also covers the proper use of psychrometers, dry bulb thermometers, hygrometers, and reading and interpretation of psychrometric charts and scales as well as ASHRAE and BPI ventilation standards for residential units. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

### **HVAC Heating Fundamentals** 10601110.....2 credits

Provides an introduction to how homes and buildings are heated. Topics include introduction to heat principles. temperature measurement, fuels and other sources of heat. combustion, basic heating systems, basic furnace design, boiler design and operation, venting of furnaces, chimney or exhaust gases, and system controls. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

### **Hydronics and Heat Pumps** 10483113.....3 credits

Addresses solar thermal, geothermal, and biomass heating systems. Students participate in the installation and design of a solar hot water system. Topics include safety; system design and layout; component selection; mounting collectors; installing and insulating copper tubing; and installing a storage tank, heat exchanger, circulation pump, and other system components.

### Intro to HVAC Installation

10601121 ......2 credits

Addresses residential and light commercial heating and cooling systems. Emphasizes the diversity of heating and cooling systems and how they operate. Students participate in the installation of a variety of HVAC systems and troubleshoot and service systems. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

### **Piping Applications**

10483121.....3 credits

Presents the fundamentals of plumbing and piping installation practices. Laboratory activities provide students with basic pipe joining processes associated with the plumbing and HVAC industries.

### Safety for Construction Trades & 10476171.....1 credit

The Safety for the Construction Trades course teaches construction related workers about their rights, employer responsibilities and how to identify, abate, avoid and prevent job related hazards. Students will familiarize themselves with the proper selection and use of personal protective equipment and safety requirements on a construction site for various activities. Course outcomes align with the training outcomes recommended by OSHA. Upon successful completion, students will receive an OSHA 10 Card.

### Welding Fundamentals 1 2 10442117 .....1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of FCAW, GMAW, and OXY-Fuel cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.



# **HOSPITALITY MANAGEMENT**

**Associate of Applied Science Program Code: 10-109-2 Total Credits: 62-63** 

Through Mid-State's Hospitality Management program, students will develop a wide array of skills useful in various roles within hospitality and tourism, including a fundamental understanding of food service operations, hospitality sales and marketing, events planning, management principles, customer service, effective communication, and creative thinking. Students in this program engage in various activities and learning opportunities surrounding hospitality and tourism. You will plan events, produce sales and marketing projects, draft budgets, apply culinary skills and plan menus, practice effective management and customer service, and participate in an industry-related internship.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

f in y

MID-STATE

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**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481

WISCONSIN RAPIDS CAMPUS 500 32nd Street North

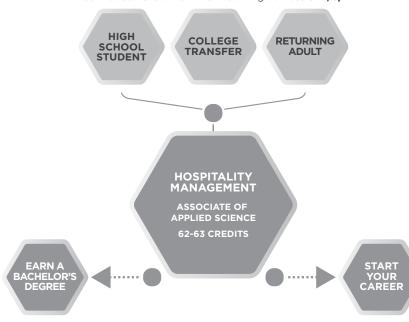
Wisconsin Rapids, WI 54494

### **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



**OTHER OPTIONS** 

**RELATED PROGRAMS** 

· Culinary Arts

#### **CAREER OPTIONS**

- Food and Beverage Director
- Hospitality and Tourism Coordinator
- Sales and Service Manager

### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, and UW-Whitewater.

For more information and additional opportunities, visit mstc.edu/transfer.

#### PROGRAM OUTCOMES

Employers will expect you, as a Hospitality Management graduate, to be able to:

- Plan the operations within a hospitality organization.
- Organize hospitality resources to achieve the goals of the organization.
- Direct individuals and/or processes to meet organizational goals.
- Control hospitality processes/procedures.

#### TECHNICAL SKILLS ATTAINMENT

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will fulfill the TSA requirement upon completion of the business plan and projects in Sanitation for Food Service Operations, Introduction to Food Production, and Hospitality Concept Development courses.

NOTES:			

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

### Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10104102 10106106 10109101 10316112 10801136 10809103	Marketing Principles   Marketing Principles   Quality Customer Service Exploring Hospitality Sanitation for Foodservice Operations   English Composition 1   Think Critically & Creatively	3 3 3 1 3 3
Term 10109112 10109130 10109157 10316126 10801196 10801198 10804107	Tourism Hospitality Sales and Promotion Internship-Tourism, Lodging, Guest Services Culinary Applications Oral/Interpersonal Communication & -or- Speech & College Mathematics & -or-	3
10804118 10804189	Intermediate Algebra with Applications & -or- Introductory Statistics &	4 3
Term 10109105 10109110 10109134 10109158 10316127 10316160	Hospitality Concept Development & Room Operations Division Cost Control-Revenue Management Internship-Culinary, Food/Beverage, Special Events Menu Planning Catering and Special Event Planning &	3 3 3 1 3 3 3
<b>Term</b> 10109107 10196191 10196193 10809166 10809198	Hospitality Law and Liability Supervision Human Resource Management Intro to Ethics: Theory & Application & Intro to Psychology &  Total credits 62	3 3 3 3 3

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This program can be completed entirely online.
- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10106106 10109101 10316112	Exploring Hospitality 3	<b>s</b> 3 3
<b>Term</b> 10109112 10801136 10809103	English Composition 1 2 3	<b>s</b> 3 3 3
<b>Term</b> 10109110 10804107		<b>S</b> 3
10804118 10804189	Intermediate Algebra with Applications 2 - or- Introductory Statistics 2 3	1 3
<b>Term</b> 10109130 10109157 10316126 10801196 10801198	Internship-Tourism, Lodging, Guest Services Culinary Applications Oral/Interpersonal Communication & -or-	<b>s</b> 3 1 2
<b>Term</b> 10109105 10109158 10809166	Internship-Culinary, Food/Beverage, Special Events	<b>s</b> 3
<b>Term</b> 10104102 10109107 10809198	Marketing Principles & 3 Hospitality Law and Liability Intro to Psychology & 3	
<b>Term</b> 10109134 10316127 10316160	Menu Planning	<b>s</b> 3 3 3
<b>Term</b> 10196191 10196193	· · · ·	<b>s</b> 3
	Total credits 62-63	5

### Catering and Special Event Planning & 10316160 .....3 credits

Introduces how to develop, plan and execute catering and special events to the exacting details of the customer. Emphasis is on the importance of details in planning to achieve the best possible results. Activities will encourage both creative thinking and functionality to ensure customer satisfaction and business profitability.

### College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Cost Control-Revenue Management** 10109134 ......3 credits

Covers the concepts and techniques of controlling costs with particular emphasis placed on cost-to-sales relationship. Utilizing industry specific technology, students calculate the cost of goods, selling price and relative percentages. They also forecast sales, conduct yield analyses and calculate break-even points.

### **Culinary Applications**

10316126.....2 credits

Applies the basic principles of culinary calculations involved in the purchase, preparation and use of goods related to the hospitality field.

### English Composition 1 2

10801136 ......3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Exploring Hospitality**

10109101.....3 credits

Introduces students to the broad field of hospitality management. Typical career areas include foodservice. lodging, travel/tourism, and recreation. The course will explore the industry from historical to contemporary career opportunities.

### Hospitality Concept Development & 10109105.....3 credits

Introduces the learner to the basic process and consideration for a hospitality business from concept to start-up. Included in this study with be concept and menu development, equipment, facility layout, and design. This course will evaluate the business idea from a financial,

Prerequisite: Culinary Applications 10316126

### **Hospitality Law and Liability**

operational, and practical view.

10109107 ......3 credits

Introduces legal principles together with standard business law concepts and emphasizes their implications for the hospitality and tourism industry. Among the topics covered are contracts, torts and negligence, hotel/guest relationships, ADA, food service and employment laws and consumer protection. Case studies involving the basic principles of law assist in developing judgment in these areas.

### **Hospitality Sales and Promotion**

10109130 ......3 credits

Covers sales and promotion in the hospitality industry. The emphasis is on promoting hospitality entities to attract new customers, selling principles and merchandising techniques for products and services, and innovative ways to maintain the interest of existing customers.

#### **Human Resource Management** 10196193.....3 credits

Applies skills and tools necessary to perform human resource functions in an organization. Each learner demonstrates skill in following EEOC laws; writing job descriptions; recruiting, selecting, and orienting employees; developing policies and procedures; developing and conducting training; designing performance appraisal plans;

compensation and benefit strategies. Prerequisite: Nine core credits from a 102, 103, 109, 196, or 623 program code

developing employee development plans; and selecting

#### Intermediate Algebra with Applications & 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Internship-Culinary, Food/Beverage, Special Events 10109158 ......1 credit

This internship provides students with practical knowledge and experience in the hospitality industry through the lens of restaurant, food and beverage, and special event service workers and managers. Integrating the theories and techniques learned in previous courses with specific off-campus occupational experiences at selected training sites allows students to gain a real-world perspective of this segment of the industry.

Prerequisites: Admission to Hospitality Management program 101092 and completion of 10 core credits within the Hospitality Management program or consent of instructor.

# Internship-Tourism, Lodging, Guest Services 10109157 ......1 credit

This internship provides students the opportunity to work with an industry business partner in the area of tourism, lodging, and guest services applying their previous classroom theory and learning to the real world of the hospitality industry. Students can earn a ManageFirst™ industry certificate in Hotel & Restaurant Management through the course while gaining valuable experience under the supervision of a hospitality industry professional. Prerequisites: Admission to Hospitality Management program 101092 and completion of 10 core credits within the Hospitality Management program or consent of instructor

# Intro to Ethics: Theory & Application & 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Psychology 2 10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Introductory Statistics &

10804189 .....3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent.

### Marketing Principles 🗷

This course serves as an introduction to the fundamental marketing concepts used to apply marketing strategies to product development, distribution, pricing, and promotion of goods and services.

### **Menu Planning**

10316127.....3 credits

A hands-on approach to planning, creating, and maintaining effective menus. Discussions include menu items and placement, food costing and creative menu designs for visual appeal. Menu planning and design software may be utilized.

# Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Quality Customer Service

10106106.....3 credits

Addresses sensitivity in communicating with customers and co-workers. Includes international communications, teamwork, working relationships, and telephone skills.

### Room Operations Division

10109110.....3 credits

Investigates the organization, performance, evaluation, and interdependency of the rooms division of a lodging facility (front desk, reservations, housekeeping, facilities, and telephone systems) as essential components of operational success and guest satisfaction.

# Sanitation for Foodservice Operations 2 10316112 ......1 credit

Students examine the causes of food-borne illness and apply techniques for preparing, storing, and serving hot and cold foods from a ServSafe® Certified Instructor/ Proctor. Students also examine the role of management and workers related to sanitation regulations and standards. The ServSafe® certification test is administered in this course and students will need to hold this valid certificate for graduation and employment in the culinary industry.

#### Speech 🗷

10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

### Supervision

10196191 ......3 credits

Applies skills and tools necessary to perform the functions of a contemporary frontline leader. Students engage in operational planning, analyze organizational structures, review the staffing process, employ techniques to enhance employee personal and group effectiveness, and develop control techniques to measure effectiveness in the above areas.

# Think Critically & Creatively 10809103 ......3 credits

Provides instruction in the vital, realistic, and practical methods of thinking that are in high demand in all occupations of substance today. Provides in-depth consideration of decision making, problem solving, detailed analysis of ideas, troubleshooting, argumentation, persuasion, creativity, setting goals and objectives, and more. Students apply specific thinking strategies and tools to situations in a wide variety of workplace, personal, academic, and cultural situations. Classroom instruction is based on demonstration, discussion, projects, and teamwork. Assignments range from the short and simple to the detailed and complex. Focuses on reality and practicality throughout.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Tourism

10109112 ......3 credits

Focuses on the opportunities and advantages of approaching tourism from a community viewpoint. Students study the economic, employment and environmental impact of tourism on the quality of life experienced by a community. Particular emphasis will be placed on the impact of tourism in WI.



# HUMAN RESOURCES ASSISTANT

Technical Diploma
Program Code: 31-116-1

**Total Credits: 27** 

Mid-State's Human Resources Assistant program prepares students to successfully manage activities involving new staff, including recruiting, interviewing, hiring, and onboarding. Graduates can provide support for all existing staff regarding employment needs as well as integrate human resources to align with an organization's strategic direction. In this program students will engage in various activities and learning opportunities focused on employee support, vital aspects of the hiring process, and labor relations and law. Students will also develop and practice effective communication skills to meet the needs of the employer and employees in any organization.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_

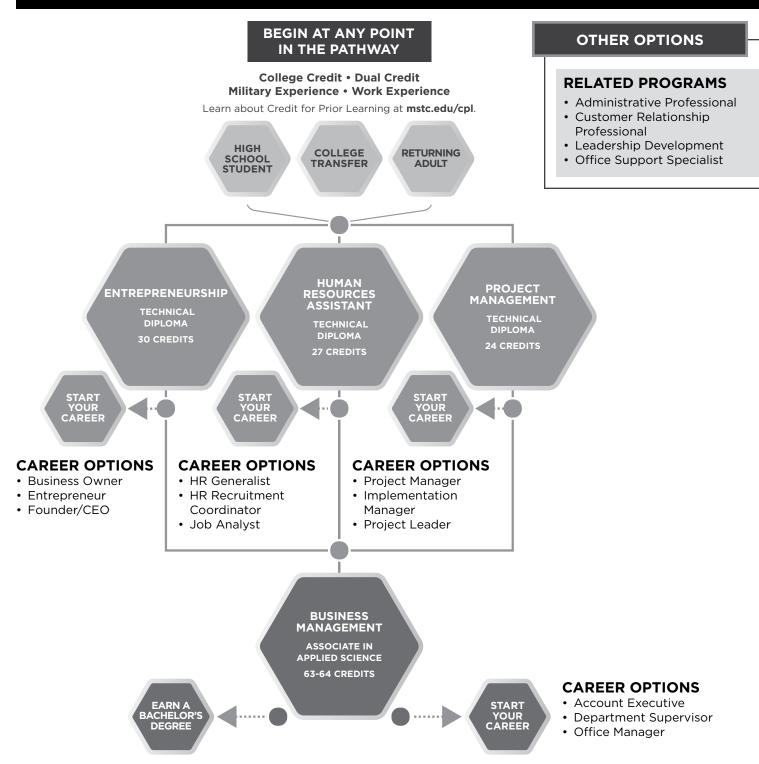
mstc.edu 888.575.6782 TTY: 711



MID-STATE
TECHNICAL COLLEGE

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500 32nd Street North Wisconsin Rapids, WI 54494



#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Human Resources Assistant graduate, to be able to:

- Create an organizational workforce plan.
- Assist with developing training programs.
- Complete an employee review process.
- · Apply the selection process.
- Incorporate employment law into business practices.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Human Resource Management course.

NOTES:			

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

### Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### SAMPLE FULL-TIME CURRICULUM OPTION **Term** 12 credits 10102138 Organizational Behavior 🗹 3 Microsoft Office-Introduction & 3 10103106 10801136 English Composition 12 3 10809196 Intro to Sociology 2 3 **Term** 15 credits 10102110 **Employment Law** 10102121 Finance and Budgeting Z 3 10196191 Supervision Z 3 10196193 **Human Resource Management** 3 10801198 Speech Z 3 **Total credits 27**

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

#### SAMPLE PART-TIME CURRICULUM OPTION **Term** 6 credits 10103106 Microsoft Office-Introduction 3 10809196 3 Intro to Sociology 🗹 **Term** 6 credits 10196191 Supervision Z 10801136 3 English Composition 1 🗷 6 credits Term 10102138 Organizational Behavior & 3 10801198 Speech 🗷 3 9 credits **Term** 10102110 **Employment Law** 3 10102121 Finance and Budgeting Z 3 10196193 Human Resource Management 3 **Total credits 27**

NOTES:		

### **Employment Law**

10102110 ......3 credits

Introduces a broad scope of employment laws and provides the opportunity to apply these laws to the employment arena. Includes laws relating to anti-discrimination, including the Civil Rights Act, ADEA, and ADA; wage and hour regulation, including FLSA; employer-provided pensions, including ERISA; health insurance, including COBRA and ACA; and unemployment and worker's compensation insurance.

### English Composition 1 2

10801136 ......3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

### Finance and Budgeting ©

10102121 ......3 credits

For the nonfinancial manager, this course introduces the language of accounting, finance, and budgeting. Provides an overview of the use and analysis of financial statements. Business planning and the foundations and development of budgets are explored. Business financing basics and the securing of necessary financing for a business are covered. Practical application of financial statement creation and analysis, budgetary activities, and finance calculations are included.

#### Human Resource Management 10196193.....3 credits

Applies skills and tools necessary to perform human resource functions in an organization. Each learner demonstrates skill in following EEOC laws; writing job descriptions; recruiting, selecting, and orienting employees; developing policies and procedures; developing and conducting training; designing performance appraisal plans; developing employee development plans; and selecting compensation and benefit strategies.

Prerequisite: Nine core credits from a 102, 103, 109, 196, or 623 program code.

### Intro to Sociology &

10809196 ......3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Microsoft Office-Introduction 🗹

10103106 ......3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

### Organizational Behavior 🗷

10102138.....3 credits

This course assists the learner in becoming a more effective co-worker, team member and organizational citizen through an understanding of the key principles of how people behave within organizations and in turn, predict and influence future behavior. As a result, the learner will analyze organizational structures, assess organizational culture, analyze leadership types and styles, apply conflict resolution strategies, explore power relationships, implement change management techniques, demonstrate effective team management and describe the ingredients of diversity as these aspects are related to people's behavior in organizations.

### Speech 🗷

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Supervision 🗹

10196191 .....3 credits

Applies skills and tools necessary to perform the functions of a contemporary frontline leader. Students engage in operational planning, analyze organizational structures, review the staffing process, employ techniques to enhance employee personal and group effectiveness, and develop control techniques to measure effectiveness in the above areas.



# INDUSTRIAL MECHANICAL TECHNICIAN

Associate in Applied Science (AAS)
Program Code: 10-462-1
Total Credits: 60-61

Mid-State's Industrial Mechanical Technician program will give you the hands-on foundation necessary to confidently maintain, repair, and operate mechanical and electrical machinery and equipment in an industrial environment. You will learn to align, maintain, repair, and replace machine components as well as gain understanding of predictive and preventive maintenance, reliability-centered maintenance, automation, and many other topics. The program emphasizes safety in the workplace and includes many hands-on and interactive classroom experiences and lab/shop activities.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_\_\_

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





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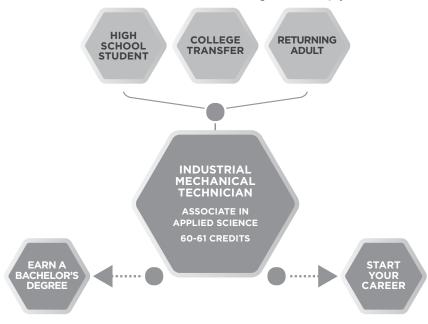
500 32nd Street North Wisconsin Rapids, WI 54494

### **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

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#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- · Precision Machining Technician
- Manufacturing Operations Management
- Stainless Steel Welding
- · Welding

# APPRENTICESHIP OPPORTUNITIES

- Maintenance Technician Apprenticeship
- Millwright/Maintenance Mechanic Apprenticeship

### **CAREER OPTIONS**

- Industrial Machinery Mechanic
- Maintenance Technician
- Predictive Maintenance (PM) Technician
- Apprenticeship

### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Platteville, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as an Industrial Mechanical Technician graduate, to be able to:

- Demonstrate safe work procedures.
- Install industrial equipment and systems.
- · Maintain industrial equipment and systems.
- Troubleshoot industrial equipment and systems.
- · Repair industrial equipment and systems.
- · Communicate technical information.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will be assessed in the Mechanical Power Transmission course to fulfill the TSA requirement.

#### PROTECTIVE CLOTHING

Students are required to wear safety glasses at all times in the lab. Acquiring safety glasses is the responsibility of the student. Proper clothing is discussed in safety lectures.

NOTES:		

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### GPS for Student Success &

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

### Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10462122 10462132 10605105 10801136 10804118	Preventive, Predictive, and RCM Machine Shop Fundamentals Electrical Circuits I English Composition 1 & Intermediate Algebra with Applications &	dits 2 3 3 4
Term	15 cre	dits
10462107 10462110 10462133 10623106	Industrial Safety & Material Handling Electric Controls for Industrial Automation Intro to AutoCAD	2 2 3 1
10623114 10801196 10801198 10804196	Intro to Inventor Oral/Interpersonal Communication & -or- Speech & Trigonometry with Applications &	1 3 3
Томпо	16 040	ما:4ء
Term 10442117 10442118 10462104 10462106 10605117 10462131 10809188 10809198	Welding Fundamentals 1 2 Welding Fundamentals 2 2 Fluid Process Systems Mechanical Power Transmission Automation 1 - Beginning PLC 2 Industrial Electric Power Applications Developmental Psychology 2 -or- Intro to Psychology 2	1 1 3 3 3 2
Term	14-15 cre	dits
10457119 10457120 10462120 10605118 10806143	Fabrication Fundamentals 1 2 Fabrication Fundamentals 2 Industrial Hydraulics & Pneumatics Automation 2 - Advanced PLC Industrial Physics 1 Fabrication 2 - Advanced PLC Industrial Physics 1 Industri	1 1 3 3 3
10809166	Intro to Ethics: Theory & Application  Total credits 60	3

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10462122 10462132 10804118	Preventive, Predictive, and RCM Machine Shop Fundamentals Intermediate Algebra with Application	9 credits 2 3 ons 🗹 4	
<b>Term</b> 10462107 10462110 10804196	Industrial Safety & Material Handling Trigonometry with Applications &	7 credits 2 2 3	
<b>Term</b> 10442117 10442118 10605105 10801136	Welding Fundamentals 1 & Welding Fundamentals 2 & Electrical Circuits I English Composition 1 &	8 credits 1 1 3 3	
<b>Term</b> 10462133 10623106 10623114 10801196 10801198	Electric Controls for Industrial Autor Intro to AutoCAD Intro to Inventor Oral/Interpersonal Communication of Speech &	1	
<b>Term</b> 10462106 10462131 10605117	Mechanical Power Transmission Industrial Electric Power Application Automation 1 - Beginning PLC &	8 credits 3 ns 2 3	
<b>Term</b> 10457119 10457120 10806143	Fabrication Fundamentals 1 & Fabrication Fundamentals 2 & College Physics 1	1 1 3	
10806154 10809188 10809198	General Physics 1 <b>©</b> Developmental Psychology <b>© -or-</b> Intro to Psychology <b>©</b>	4	
<b>Term</b> 10462104 10809166	Fluid Process Systems Intro to Ethics: Theory & Application	<b>6 credits</b> 3 3	
<b>Term</b> 10462120 10605118	Industrial Hydraulics & Pneumatics Automation 2 - Advanced PLC &	6 credits 3 3	
Total credits 60-61			

### **Automation 1 - Beginning PLC**

### 10605117 .....3 credits

An overview of programmable logic controllers (PLCs) that provides a foundation of knowledge of the programming techniques, operation, and maintenance of PLCs used in typical industrial automation.

#### Automation 2 - Advanced PLC 10605118 .....3 credits

A lab intensive course covering advanced PLC topics and programming techniques, analog I/O, VFDs, basic HMI interfaces, industrial robotics and troubleshooting. Prerequisite: Automation 1 - Beginning PLC 10605117 or consent of instructor

### College Physics 1

#### 10806142 .....3 credits

Presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation and applications. Topics include laboratory safety, unit conversions and analysis, kinematics, dynamics, work, energy, power, temperature and heat. Corequisite: Trigonometry with Applications 10804196

#### Developmental Psychology & 10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Electrical Circuits I**

#### 10605105 ......3 credits

The study of Ohm's Law and its application to D.C. circuits. Major topics include: Ohm's Law, series circuits, parallel circuits, combination circuits, Kirchhoff's Laws, and power relationships. Corequisite: Intermediate Algebra with Applications 10804118

### **Electric Controls for Industrial Automation** 10462133.....3 credits

Introduces the fundamentals of industrial motor controls, relay logic, ladder diagrams, industrial automation, and integrated manufacturing systems. The purpose of the course is to familiarize students with the terminology, capabilities, applications, and limitations of automated industrial controls through classroom and lab activities. Prerequisite: Electrical Circuits 1 10605105

#### English Composition 1 2

### 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard quidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

### Fabrication Fundamentals 1 2 10457119.....1 credit

An introduction to structural shapes and sheet metal fabrication. Presents fabrication techniques, metal selection, and layout, cutting, bending, drilling, threading, and joining using manual equipment and techniques. Information is presented to the student and followed up with lab activities to provide a hands-on experience. Emphasizes developing an understanding of the tools, techniques, safe work habits, and application of sheet metal fabrication skills.

### Fabrication Fundamentals 2 2

### 10457120.....1 credit

An introduction to plate steel and heavy fabrication. Presents fabrication techniques using heavy fabrication equipment. CNC Cutting, Plate and Tube bending, Sawing and Shearing equipment will be presented and followed up with lab activities to provide a hands-on experience. Emphasizes developing an understanding of the equipment. techniques, safe work habits, and application of heavy metal fabrication skills.

### Fluid Process Systems

#### 10462104 ......3 credits

Provides a "hands-on" approach to the study of fluid handling systems. A wide variety of system components, including pumps, piping, seals and packing, flow control devices, flow measuring devices, and pressure vessels, are studied. System design considerations for fluid media temperature, pressure, specific gravity, viscosity, solids concentrations, and volume requirements are analyzed. An introduction to refrigeration and air conditioning provides the student with a basic understanding of these systems.

### General Physics 1 2

#### 10806154 ...... 4 credits

Presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation, and applications. Topics include unit conversion and analysis, vectors, translational and rotational kinematics, translational and rotational dynamics, heat and temperature, and harmonic motion and waves. Corequisite: Trigonometry with Applications 10804196

### **Industrial Electric Power Applications** 10462131 .....2 credits

Introduces concepts and applications of typical 3-phase power systems used in industry with focus on selection of overload devices, fuse sizing, wire selection, electrical motor theory and applications, and introduction to variable frequency drives through lecture and lab activities. Corequisite: Industrial Electric Control Applications 10462130

### **Industrial Hydraulics & Pneumatics** 10462120 .....3 credits

Studies basic principles of hydraulics and pneumatics. Covers the advantages, disadvantages, and inherent problems with these systems. Includes the principles of operation and the constructional features of pumps, motors, valves, seals, packing, and conductors as well as the physical properties of liquids. Students learn to identify various parts of a circuit and analyze them for their use. Prerequisite: Intermediate Algebra with Applications 10804118

### Industrial Safety &

10462107 ......2 credits Provides an overview of safety, health, and environmental

issues as they relate to industry. Various types of hazards and the controls and equipment used to reduce risks from hazards are discussed. Focuses on understanding the Occupational Safety and Health Administration (OSHA) and its function as well as other regulatory and enforcement agencies associated with industrial safety, health, and the environment.

### Intermediate Algebra with Applications & 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prereauisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### Intro to AutoCAD 10623106 ......1 credit

This introductory course in computer-aided drafting (CAD) using AutoCAD software provides foundation skills in using CAD software to create and print two-dimensional technical drawings. This course is available to students in any program. Computer skills and prior knowledge of drawing/ drafting techniques is recommended.

### Intro to Ethics: Theory & Application & 10809166 .....3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Intro to Inventor

10623114 .....1 credit

This course is an introduction to Inventor by AutoDesk. Students will learn how to create 3D models of basic objects, add dimensioning, and generate multiview projections. Corequisite: Intro to AutoCAD 10623106

### Intro to Psychology 2

10809198 ......3 credits This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical

perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of

236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Machine Shop Fundamentals

10462132.....3 credits

Students participating in this class will be introduced to common machine tools and their functions. Classroom activities and hands-on lab exercises will be used to introduce participants to some of the most common applications in machining. Lab activities will introduce students to shop safety and identification of machine tools. Students will also gain understanding of the basic processes performed with different machine tools and basic machine set up and operations.

### **Material Handling**

10462110 ......2 credits

Introduces the concepts and equipment that transport solid materials in the industrial production process. Various types of equipment, including rigging, cranes, mechanical conveyors, pneumatic conveyors, elevators, and lift trucks. are discussed. Practical applications and use guidelines are presented to promote the safe and efficient use of this type of material handling equipment.

### **Mechanical Power Transmission** 10462106 ......3 credits

A study of the systems and components that transmit power from the prime mover through the system. Gear

trains, linkages, clutches, couplings, and flexible drives are evaluated mathematically in lab situations.

# Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Preventive, Predictive, and RCM 10462122.....2 credits

Preventive, Predictive, and RCM (Reliability Centered Maintenance) is an exploration of the various maintenance systems and approaches used to maintain manufacturing and industrial facilities. Through various hands-on labs and class demonstrations, learners will explore Computerized Maintenance Management Systems (CMMS) as well as the techniques and tools associated with vibration analysis, thermography, precision alignment, and ultrasound.

# Speech ☑ 10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Trigonometry with Applications 10804196 ......3 credits

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles, complex numbers, DeMoivre's Theorem, polar coordinates, and vectors. Prerequisite: Intermediate Algebra with Applications 10804118 with a grade of "C" or better. Students without Intermediate Algebra with Applications are encouraged to bring transcripts for individual course evaluation.

# Welding Fundamentals 1 & 10442117 ......1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of FCAW, GMAW, and OXY-Fuel cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

# Welding Fundamentals 2 2 10442118 .....1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of GTAW, SMAW and Plasma cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.



# IT COMPUTER SUPPORT SPECIALIST

# Associate in Applied Science (AAS) Program Code: 10-154-3

**Total Credits: 60** 

The IT Computer Support Specialist program prepares individuals for help desk positions that provide technical support, assistance, advice, troubleshooting, training, and documentation to computer end users for hardware, software, and systems. Graduates have a working knowledge of computer hardware and software and their applications within wide area networks. In this program, handson instruction will build your familiarity with various desktop and server environments; basic computer network technologies; help desk ticketing, management, and customer support; and database design, development, and administration. The program helps to prepare graduates to test for the CompTIA A+ and Linux+ certifications as well as the Server+ and Cloud+ certifications.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where:

When:\_\_\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_\_

\_\_\_\_

mstc.edu 888.575.6782 TTY: 711



MID-STATE TECHNICAL COLLEGE

**ADAMS CAMPUS** 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449

#### STEVENS POINT CAMPUS 1001 Centerpoint Drive

1001 Centerpoint Drive Stevens Point, WI 54481

### WISCONSIN RAPIDS CAMPUS

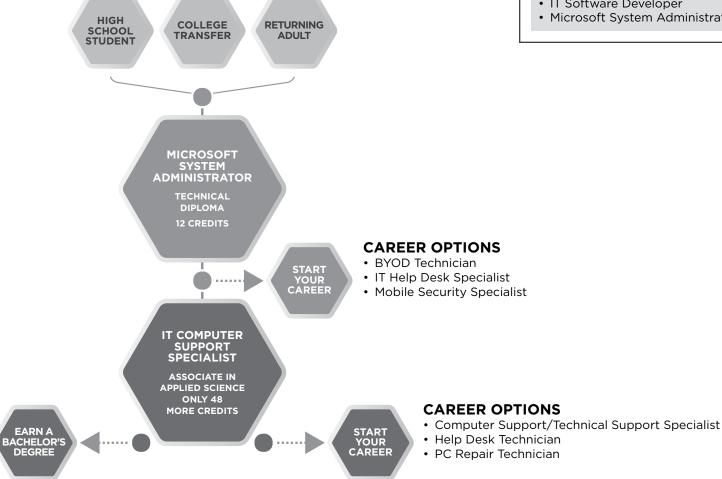
500 32nd Street North Wisconsin Rapids, WI 54494

### CAREER PATHWAY

### **BEGIN AT ANY POINT** IN THE PATHWAY

**College Credit • Dual Credit** Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### OTHER OPTIONS

#### **RELATED PROGRAMS**

- IT Network Specialist
- IT Security Specialist
- IT Software Developer
- Microsoft System Administrator

#### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as an IT Computer Support Specialist graduate, to be able to:

- Manage information technology hardware.
- · Manage software.
- Support computer networks.
- Provide end-user support.
- Solve information technology problems.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

NOTES:		

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

### Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10150110 10151105 10151110 10154102 10801136	Networking I & Linux Information Security 1 IT Essentials & English Composition 1 &	15 credits		
<b>Term</b> 10106106 10150120 10150165 10152101 10154110	Quality Customer Service Server Administration-Beginning Network Server Scripting Intro to Programming & Desktop Management	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		
Term 10150121 10154132 10804107 10804189 10809103 10809166	Server Administration Intermediate Help Desk Fundamentals College Mathematics & -or- Introductory Statistics & Think Critically & Creatively & Intro to Ethics: Theory & Application	3 3 3 3 3 5 6 6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
Term		15 credits		
10102130 10154141 10154142 10156101 10801196 10801198 10809188 10809198	Career Development & -or- Computer Support Internship Computer Support Capstone Database Concepts and Design Oral/Interpersonal Communication Speech & Developmental Psychology & -or- Intro to Psychology &	3 3 3 3 <b>2'-or-</b> 3		
Total credits 60				

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10151110 10154102 10801136	Information Security 1 IT Essentials & English Composition 1 &	9 credits 3 3 3
<b>Term</b> 10150120 10152101	Server Administration-Beginning Intro to Programming &	6 credits 3 3
<b>Term</b> 10150110 10151105	Networking I 🗹 Linux	6 credits 3 3
<b>Term</b> 10106106 10150165 10154110	Quality Customer Service Network Server Scripting Desktop Management	9 credits 3 3 3
<b>Term</b> 10154132 10804107 10804189 10809166	Help Desk Fundamentals College Mathematics & -or- Introductory Statistics & Intro to Ethics: Theory & Application	9 credits 3 3 2 3
<b>Term</b> 10102130 10154141 10156101 10801196 10801198	Career Development & -or- Computer Support Internship Database Concepts and Design Oral/Interpersonal Communication & Speech &	9 credits  3 3 7 -or- 3
<b>Term</b> 10150121 10809103	Server Administration Intermediate Think Critically & Creatively	6 credits 3 3
<b>Term</b> 10154142 10809188 10809198	Computer Support Capstone Developmental Psychology & -or- Intro to Psychology &	6 credits 3
	Total o	redits 60

### Career Development &

10102130 ......3 credits

Prepares learners for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview; and demonstrate how to deal with interpersonal situations found in a work environment. NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor, program faculty, program counselor, or department dean/associate dean to register.

### College Mathematics &

10804107 ......3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Computer Support Capstone

10154142 ......3 credits

In this capstone course students complete a project that incorporates skills gained from previous terms. Students demonstrate those skills by creating a project proposal, presenting a technical design, and/or implementing a project based on specifications provided by the instructor. *Prerequisite: Help Desk Fundamentals 10154132* 

### Computer Support Internship

10154141 ......3 credits

Integrates skills developed in classroom study with specific occupational experiences at local employment sites and develops work behavior appropriate to the business environment.

Prerequisite: Help Desk Fundamentals 10154132

### **Database Concepts and Design**

10156101 .....3 credits

Introduces the concepts of relational database design, development, and maintenance. Topics include relational normalization, referential integrity, and Structured Query Language (SQL).

### **Desktop Management**

10154110 ......3 credits

Introduces students to the skills needed to support client PC Operating Systems. Through significant hands-on activities, students learn how to configure, secure, use, and troubleshoot client operating systems.

### Developmental Psychology &

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### English Composition 1 2

10801136 ......3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Help Desk Fundamentals

10154132.....3 credits

Provides the learner with the knowledge required to become a Help Desk Support technician. Students will learn fundamental Help Desk concepts such as: Help Desk operations, roles and responsibilities, processes and procedures, tools and technologies, individual and team performance measures, and how to provide support as a Help Desk professional.

### **Information Security 1**

### 10151110.....3 credits

Introduces students to the fundamentals of information security. Topics include security terms and concepts, risk assessment, cryptography, monitoring and auditing, attacks and techniques, and the legal and ethical issues associated with information security.

### Intro to Ethics: Theory & Application & 10809166 .....3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decisionmaking process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Intro to Programming 🗹

#### 10152101 ......3 credits

Applies the basic concepts of computer programming having learners build JavaScript applications, with an emphasis on problem solving, structured programming, debugging, and testing. Additional topics include: online software development resources, programming and documentation standards, variable lifetime/scope, data types, control structures (conditions and iterations) and mathematical calculations.

### Intro to Psychology & 10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Introductory Statistics &

10804189 ......3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course. Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or

ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent.

#### IT Essentials

10154102 ......3 credits

An introduction course that aligns with the CompTIA A+ certification. This class is designed to teach students how to build, configure, secure, network, and troubleshoot PCs.

### Linux

10151105 ......3 credits

Covers introductory Linux topics, including operating system basics, system installation, file system management, file system administration, and basic commands.

### **Network Server Scripting**

10150165 ......3 credits

Provides best practices and techniques in Linux and Windows shell and command line scripting using PowerShell and BASH.

Prerequisite: IT Essentials 10154102

### Networking I 2

10150110.....3 credits

Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, participants will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course is the first of three courses that align with CCNA certification. Covers the objectives of the first CCNA exam.

### Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Quality Customer Service**

10106106.....3 credits

Addresses sensitivity in communicating with customers and co-workers. Includes international communications, teamwork, working relationships, and telephone skills.

# Server Administration-Beginning 10150120 ......3 credits

Develops skill in the design, installation, administration, and management of computer networks. Topics include network design; installation and configuration of a commonly used network operating system; service packs and updated drivers; user accounts, groups, profiles, and policies; file system security; printer management; and application software installation, backup, and recovery. *Prerequisite: Hardware Essentials 10154102* 

# Server Administration-Intermediate 10150121 ......3 credits

Expands on the administration skills needed for successful management of a network operating system in a business environment. Topics include installation and configuration of a network operating system, monitoring and performance tuning, monitoring and analyzing network traffic, licensing, network devices, DNS, FTP, web services, and directory services.

Prerequisite: Server Administration-Beginning 10150120

### Speech &

10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

# Think Critically & Creatively & 10809103 ......3 credits

Provides instruction in the vital, realistic, and practical methods of thinking that are in high demand in all occupations of substance today. Provides in-depth consideration of decision making, problem solving, detailed analysis of ideas, troubleshooting, argumentation, persuasion, creativity, setting goals and objectives, and more. Students apply specific thinking strategies and tools to situations in a wide variety of workplace, personal, academic, and cultural situations. Classroom instruction is based on demonstration, discussion, projects, and teamwork. Assignments range from the short and simple to the detailed and complex. Focuses on reality and practicality throughout.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.



# **IT NETWORK SPECIALIST**

# Associate in Applied Science (AAS) Program Code: 10-150-2

**Total Credits: 63** 

The IT Network Specialist program at Mid-State prepares students to administer and support personal computer and network environments. Graduates are able to install, troubleshoot, analyze, and repair networks as well as maximize network efficiency. In this program you will follow guided instructions for setting up and managing multiple computers in a networking environment. You'll also apply concepts in hands-on activities both in and outside the classroom. Past students have repaired and imaged laptops for a local school district. completed a network upgrade for a nonprofit organization, and fixed computers at the PC Clinic.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





**ADAMS CAMPUS** 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481

WISCONSIN RAPIDS CAMPUS 500 32nd Street North

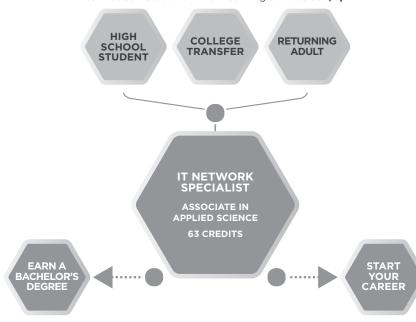
Wisconsin Rapids, WI 54494

### **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### OTHER OPTIONS

#### **RELATED PROGRAMS**

- IT Computer Support Specialist
- IT Security Specialist
- IT Software Developer
- Microsoft System Administrator

### **CAREER OPTIONS**

- Computer Network Support Specialist
- Hardware Support Specialist
- Network Administrator

### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit **mstc.edu/transfer**.

#### **PROGRAM OUTCOMES**

Employers will expect you, as an IT Network Specialist graduate, to be able to:

- Implement computer networks.
- · Implement client systems.
- · Implement server operating systems.
- Implement network security components.
- · Develop technical documentation.
- Troubleshoot network systems.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will complete an extensive project in the Advanced Networking Projects course to fulfill the TSA requirement.

NOTES:		

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

### Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

Term 10150110 10151105 10151110 10154102 10801136  Term	Networking I & Linux Information Security 1 & IT Essentials & English Composition 1 & IT &	15 credits 3 3 3 3 3 3
10150111 10150120 10150165 10152101 10801196 10801198	Networking II  Server Administration-Beginning Network Server Scripting Intro to Programming Oral/Interpersonal Communication  Speech  Speech	3 3 3 3
<b>Term</b> 10150112 10150121 10150130 10154132 10804107 10804189 10809103	Networking III Server Administration-Intermediate Virtualization Help Desk Fundamentals College Mathematics & -or- Introductory Statistics & Think Critically & Creatively &	18 credits
<b>Term</b> 10102130 10150142 10150113 10150161 10809166 10809188 10809198	Career Development -or- Network Specialist Internship Networking IV Advanced Networking Projects Intro to Ethics: Theory & Application Developmental Psychology -or- Intro to Psychology ©	15 credits
	Total C	Credits 63

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

### SAMPLE PART-TIME CURRICULUM OPTION

9 credits 3 3 3	Networking I & Information Security 1 & IT Essentials &	<b>Term</b> 10150110 10151110 10154102	
<b>9 credits</b> 3 3 3	Networking II <b>&amp;</b> English Composition 1 <b>&amp;</b> Server Administration-Beginning	<b>Term</b> 10150111 10801136 10150120	
6 credits 3 <b>2</b> -or-	Linux Oral/Interpersonal Communication © Speech ©	<b>Term</b> 10151105 10801196 10801198	
<b>9 credits</b> 3 3	Intro to Programming Networking III Developmental Psychology <b>-or-</b> Intro to Psychology <b>©</b>	<b>Term</b> 10152101 10150112 10809188 10809198	
6 credits 3 3	Network Server Scripting Help Desk Fundamentals	<b>Term</b> 10150165 10154132	
6 credits 3 3	College Mathematics & -or- Introductory Statistics & Server Administration-Intermediate	<b>Term</b> 10804107 10804189 10150121	
9 credits	Career Development <b>-or-</b> Network Specialist Internship Virtualization Think Critically & Creatively	<b>Term</b> 10102130 10150142 10150130 10809103	
9 credits 3 3 3 7 2 3	Networking IV Advanced Networking Projects Intro to Ethics: Theory & Application	<b>Term</b> 10150113 10150161 10809166	
iotal Credits 63			

### Advanced Networking Projects

10150161 ......3 credits

In this capstone course students complete projects that incorporate networking skills gained from previous terms. Students demonstrate those skills by creating a project proposal, presenting a technical design, and/or implementing a project based on specifications provided by the instructor.

Prerequisites: Networking III 10150112 and Virtualization 10150130

### **Career Development**

10102130 .....3 credits

Prepares learners for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview; and demonstrate how to deal with interpersonal situations found in a work environment. NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor, program faculty, program counselor, or department dean/associate dean to register.

### College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### 

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### English Composition 1 2

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Help Desk Fundamentals**

10154132.....3 credits

Provides the learner with the knowledge required to become a Help Desk Support technician. Students will learn fundamental Help Desk concepts such as: Help Desk operations, roles and responsibilities, processes and procedures, tools and technologies, individual and team performance measures, and how to provide support as a Help Desk professional.

### Information Security 1

10151110 ......3 credits

Introduces students to the fundamentals of information security. Topics include security terms and concepts, risk assessment, cryptography, monitoring and auditing, attacks and techniques, and the legal and ethical issues associated with information security.

# Intro to Ethics: Theory & Application © 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Programming © 10152101 ......3 credits

...... Crearts

Applies the basic concepts of computer programming having learners build JavaScript applications, with an emphasis on problem solving, structured programming, debugging, and testing. Additional topics include: online software development resources, programming and documentation standards, variable lifetime/scope, data types, control structures (conditions and iterations) and mathematical calculations.

### Intro to Psychology &

10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Introductory Statistics &

10804189 .....3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent.

#### IT Essentials 2

10154102 ......3 credits

An introduction course that aligns with the CompTIA A+ certification. This class is designed to teach students how to build, configure, secure, network, and troubleshoot PCs.

#### Linux

10151105 ......3 credits

Covers introductory Linux topics, including operating system basics, system installation, file system management, file system administration, and basic commands.

### **Network Server Scripting**

10150165 ......3 credits

Provides best practices and techniques in Linux and Windows shell and command line scripting using PowerShell and BASH.

Prerequisite: IT Essentials 10154102; Corequisite: Server Administration-Beginning 10150120

### Network Specialist Internship

10150142 ......3 credits

Integrates networking skill developed in classroom study with specific occupational experiences at local employment sites. Develops work behavior appropriate to the computer information systems environment.

Prerequisite: Completion of at least 20 credits in occupationalspecific IT Network Specialist courses or consent of instructor.

### Networking I 🗹

10150110.....3 credits

Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, participants will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course is the first of three courses that align with CCNA certification. Covers the objectives of the first CCNA exam.

### Networking II 🗹

10150111.....3 credits

Describes the architecture, components, and operations of routers and switches in a small network. It focuses on small-to-medium business networks and includes wireless local area networks (WLANs) and security concepts. Students learn key switching and routing concepts. They can perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN. This course is the second of three courses that align with CCNA certification. Covers the objectives of the first CCNA exam but is not designed or intended to be a "test prep" course.

Prerequisites: Networking I 10150110 and IT Essentials 10154102

### Networking III

10150112 ......3 credits

This course covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access. Students are introduced to network management tools and learn key concepts of software-defined networking, including controller-based architectures and how application programming interfaces (APIs) enable network automation. This course is the final course that aligns with the CCNA certification. The course covers the objectives of the second CCNA exam but is not designed or intended to be a "test prep" course. *Prerequisite: Networking II 10150111* 

#### **Networking IV**

10150113 ......3 credits

Discusses the new and upcoming technologies and network services required by converged applications in complex networks. Students will learn how to provision and monitor services in the cloud and network based applications. *Prerequisites: Networking III 10150112 and Virtualization 10150130* 

# Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Server Administration-Beginning 10150120 ......3 credits

Develops skill in the design, installation, administration, and management of computer networks. Topics include network design; installation and configuration of a commonly used network operating system; service packs and updated drivers; user accounts, groups, profiles, and policies; file system security; printer management; and application software installation, backup, and recovery. *Prerequisite: IT Essentials 10154102* 

# Server Administration-Intermediate

**10150121......3 credits**Expands on the administration skills needed for successful

Expands on the administration skills needed for successful management of a network operating system in a business environment. Topics include installation and configuration of a network operating system, monitoring and performance tuning, monitoring and analyzing network traffic, licensing, network devices, DNS, FTP, web services, and directory services.

Prerequisite: Server Administration-Beginning 10150120

# Speech &

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

# Think Critically & Creatively & 10809103 ......3 credits

Provides instruction in the vital, realistic, and practical methods of thinking that are in high demand in all occupations of substance today. Provides in-depth consideration of decision making, problem solving, detailed analysis of ideas, troubleshooting, argumentation, persuasion, creativity, setting goals and objectives, and more. Students apply specific thinking strategies and tools to situations in a wide variety of workplace, personal, academic, and cultural situations. Classroom instruction is based on demonstration, discussion, projects, and teamwork. Assignments range from the short and simple to the detailed and complex. Focuses on reality and practicality throughout.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Virtualization

10150130 .....3 credits

This course introduces students to virtualization and virtualization technologies like VMware. In this course students will get first-hand experience using ESXi, vSphere, vCenter, vMotion, storage types, vSwitches, and high availability. This course aligns with the VCA certification. The course covers the objectives of the VCA exam but is not designed nor intended to be a "test prep" course. *Prerequisites: Server Administration-Beginning 10150120 and Linux 10151105* 



# IT SECURITY SPECIALIST

# Associate in Applied Science (AAS) Program Code: 10-151-3 Total Credits: 60-61

Graduates of this program understand the security measures needed to safeguard an organization's electronic files and computer networking infrastructure. Students will be involved in planning, implementing, and monitoring information technology security systems. Through hands-on projects, you will learn ethical hacking techniques in order to fully understand network vulnerabilities. You will also learn effective ways to implement intrusion detection systems to mitigate security risks. Includes demonstration of the use of computer forensics to help track down and stop potential information security breaches.

Estimated tuition and fees: mstc.edu/programcosts

# **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_\_\_

With: \_\_\_\_\_\_\_

Official Transcripts

- Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- □ Other:\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





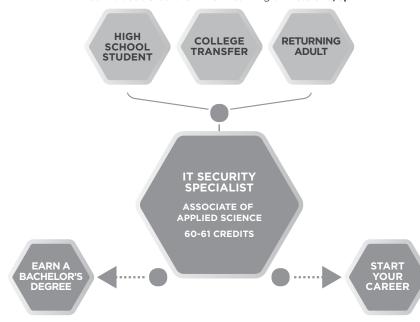
**ADAMS CAMPUS** 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **OTHER OPTIONS**

### **RELATED PROGRAMS**

- IT Computer Support Specialist
- IT Network Specialist
- IT Software Developer
- Microsoft System Administrator

# **CAREER OPTIONS**

- Computer Security Specialist
- Information Security Analyst
- Security Operations Center (SOC) Analyst

# **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

### **PROGRAM OUTCOMES**

Employers will expect you, as an IT Security Specialist graduate, to be able to:

- Identify security strategies.
- · Implement secure infrastructures.
- · Conduct security testing.
- · Analyze security data.
- · Mitigate risk.
- Develop security documentation.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will complete a project in the IT Security Capstone course to fulfill the TSA requirements.

NOTES:		

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10150110 10151105 10151110 10154102 10801136	Networking I & Linux Information Security 1 & IT Essentials & English Composition 1 &	edits
<b>Term</b> 10150111 10150120 10150165 10152101 10801196 10801198	Networking II & Server Administration-Beginning Network Server Scripting Intro to Programming & Oral/Interpersonal Communication & -or-Speech &	edits
Term 10150112 10151111 10151160 10804107	Networking III Information Security 2 Ethical Hacking College Mathematics & -or- Intermediate Algebra with Applications &	3 3 3 3
10809103 <b>Term</b> 10102130 10151141 10151112 10809166 10151161	Think Critically & Creatively 🗹	3 edits 3 3 3
10809188 10809198	Developmental Psychology & -or- Intro to Psychology & Total credits 6	3

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

# SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10150110 10151110 10154102	Networking I & Information Security 1 & IT Essentials &	9 credits 3 3 3
<b>Term</b> 10150111 10152101 10801196 10801198	Networking II & Intro to Programming & Oral/Interpersonal Communication Compacts of the Speech &	9 credits 3 3 <b>2</b> -or-
<b>Term</b> 10151105 10150112 10801136	Linux Networking III English Composition 1 &	9 credits 3 3 3
<b>Term</b> 10150120 10150165 10809188 10809198	Server Administration-Beginning Network Server Scripting Developmental Psychology & -or- Intro to Psychology &	<b>9 credits</b> 3 3 3
<b>Term</b> 10809103 10151111	Think Critically & Creatively & Information Security 2	6 credits 3 3
<b>Term</b> 10151112 10809166	Information Security 3 Intro to Ethics: Theory & Application	6 credits 3 3
<b>Term</b> 10151160 10804107	Ethical Hacking College Mathematics & -or-	7-7 credits 3 3
10804118 <b>Term</b>	Intermediate Algebra with Application	ons <b>c</b> 4  6 credits
10102130 10151141 10151161	Career Development <b>-or-</b> IT-Security Internship IT Security Capstone	3
	Total cre	dits 60-61

# Career Development

10102130 ......3 credits

Prepares learners for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview; and demonstrate how to deal with interpersonal situations found in a work environment. NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor, program faculty, program counselor, or department dean/associate dean to register.

# College Mathematics &

10804107 ......3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Developmental Psychology &

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# English Composition 1 &

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Ethical Hacking**

10151160 .....3 credits

Introduces the techniques hackers use to discover vulnerabilities. Students will learn ways to tighten the network security to protect the exposed data from the discovered vulnerabilities. Focus is on penetration-testing tools and techniques that security testers and ethical hackers use to protect computer networks. *Prerequisite: Information Security 1 10151110* 

# Information Security 1 2

10151110 ......3 credits

Introduces students to the fundamentals of information security. Topics include security terms and concepts, risk assessment, cryptography, monitoring and auditing, attacks and techniques, and the legal and ethical issues associated with information security.

# Information Security 2

10151111.....3 credits

Introduces students to intrusion detection tools, network security design, various types of network firewalls, and the basics of VPN configuration. A solid understanding of LAN/WAN fundamentals is required for this course. *Prerequisite: Information Security 1 10151110* 

# Information Security 3

10151112 ......3 credits

This course explores security incidents and intrusions, including identifying and categorizing incidents. Students will be responding to incidents, and analyzing logs and network traffic. Additionally, students will be utilizing various tools and creating an incident response team. *Prerequisite: Information Security 2 10151111* 

# Intermediate Algebra with Applications © 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Ethics: Theory & Application © 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Programming ©

10152101 .....3 credits

Applies the basic concepts of computer programming having learners build JavaScript applications, with an emphasis on problem solving, structured programming, debugging, and testing. Additional topics include: online software development resources, programming and documentation standards, variable lifetime/scope, data types, control structures (conditions and iterations) and mathematical calculations.

# Intro to Psychology 2 10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# 

10154102 ......3 credits

An introduction course that aligns with the CompTIA A+ certification. This class is designed to teach students how to build, configure, secure, network, and troubleshoot PCs.

# **IT Security Capstone**

10151161 ......3 credits

In this capstone course students complete a project that incorporates skills gained from previous terms. Students demonstrate those skills by creating a project proposal, presenting a technical design, and/or implementing a project based on specifications provided by the instructor. *Prerequisite: Information Security 2 10151111; Corequisite: Information Security 3 10151112* 

# **IT-Security Internship**

10151141 .....3 credits

Integrates skills developed in classroom study with specific occupational experiences at local employment sites and develops work behavior appropriate to the business environment.

Prerequisite: Networking III 10150112

# Linux

10151105 ......3 credits

Covers introductory Linux topics, including operating system basics, system installation, file system management, file system administration, and basic commands.

# **Network Server Scripting**

10150165 ......3 credits

Provides best practices and techniques in Linux and Windows shell and command line scripting using PowerShell and BASH.

Prerequisite: IT Essentials 10154102; Corequisite: Server Administration-Beginning 10150120

# Networking I

10150110.....3 credits

Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, participants will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course is the first of three courses that align with CCNA certification. Covers the objectives of the first CCNA exam.

# Networking II 🗹

10150111.....3 credits

Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This course is the second of four courses that align with CCNA certification. Covers the objectives of the first CCNA exam but is not designed or intended to be a "test prep" course.

Prerequisites: Networking I 10150110; IT Essentials 10154102

# Networking III

10150112 ......3 credits

This course covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access. The course also introduces software-defined networking, virtualization, and automation concepts that support the digitalization of networks. Students gain skills to configure and troubleshoot enterprise networks, and learn to identify and protect against cybersecurity threats. They are introduced to network management tools and learn key concepts of software-defined networking, including controller-based architectures and how application programming interfaces (APIs) enable network automation. This course is the final course that aligns with the CCNA certification. The course covers the objectives of the second CCNA exam but is not designed or intended to be a "test prep" course.

Prerequisite: Networking II 10150111

# Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Server Administration-Beginning

10150120 ......3 credits

Develops skill in the design, installation, administration, and management of computer networks. Topics include network design; installation and configuration of a commonly used network operating system; service packs and updated drivers; user accounts, groups, profiles, and policies; file system security; printer management; and application software installation, backup, and recovery. *Prerequisite: IT Essentials 10154102* 

# Speech 🗷

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

# Think Critically & Creatively © 10809103 ......3 credits

Provides instruction in the vital, realistic, and practical methods of thinking that are in high demand in all occupations of substance today. Provides in-depth consideration of decision making, problem solving, detailed analysis of ideas, troubleshooting, argumentation, persuasion, creativity, setting goals and objectives, and more. Students apply specific thinking strategies and tools to situations in a wide variety of workplace, personal, academic, and cultural situations. Classroom instruction is based on demonstration, discussion, projects, and teamwork. Assignments range from the short and simple to the detailed and complex. Focuses on reality and practicality throughout.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.



# IT SOFTWARE DEVELOPER

Associate in Applied Science (AAS)
Program Code: 10-152-1
Total Credits: 63-64

Graduates of Mid-State's IT Software Developer program have the skills needed to design, develop, and maintain software and software systems on a wide variety of computing devices and to meet the spectrum of business needs. You'll learn to create software to run on all platforms including network servers, desktop workstations, web pages, and Android and iOS mobile devices. You will use state-of-the-art equipment and work in teams to design, develop, test, and implement small-scale software systems for nonprofit organizations and actual simulated clients.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Other:

\_\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

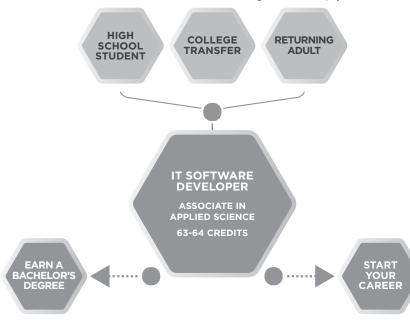
500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **OTHER OPTIONS**

### **RELATED PROGRAMS**

- IT Computer Support Specialist
- IT Network Specialist
- IT Security Specialist
- Microsoft System Administrator

# APPRENTICESHIP OPPORTUNITIES

 IT Software Developer Apprenticeship

# **CAREER OPTIONS**

- Computer Applications Engineer
- Mobile Applications Developer
- Software Developer
- Apprenticeship

# **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

### **PROGRAM OUTCOMES**

Employers will expect you, as an IT Software Developer graduate, to be able to:

- Design software systems.
- Implement a team-based software development methodology.
- Navigate in a software development environment.
- · Integrate data technologies.
- Develop software applications.
- Develop technical documentation.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will complete the TSA requirement in the Application Development Capstone course.

NOTES:			

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success &

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# **SAMPLE FULL-TIME CURRICULUM OPTION**

Term	15-16 crec	
10152101	Intro to Programming 🗹	3
10152121 10152150	Object-Oriented Programming 1 & Web Design 1 &	3 3 3 3
10801136	English Composition 1 &	3
10804107	College Mathematics 🗹	3
	-or-	
10804118	Intermediate Algebra with Applications 🗹	4
Term	15 cred	lits
10152122	Object-Oriented Programming 2	3
10152159	User Experience Design	3
10152174	Collaborative Application Development	3 3 3
10156101 10801196	Database Concepts and Design Oral/Interpersonal Communication <b>* -or-</b>	3
10801198	Speech &	3
_		
Term	15 crec	
10152155 10152160	Web Programming 1 & Introductory Mobile	3
10152100	Application Development	3
10152175	Software Architecture	3
10156102	SQL Development	3
10801197	Technical Reporting <b>-or-</b>	
10804189	Introductory Statistics 🗹	3
Term	18 cred	lits
10152123	Object-Oriented Programming 3	3
10152158	Web Programming 2	3 t 3 3
10152161	Intermediate Mobile Application Developmen	t 3
10152176	Application Development Capstone	3
10809166	Intro to Ethics: Theory & Application & Developmental Psychology & -or-	3
10809198	Intro to Psychology 2	3
	Total credits 63-	64

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

# SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10152101 10152121 10152150	9 cred Intro to Programming & Object-Oriented Programming 1 & Web Design 1 &	l <b>its</b> 3 3 3
<b>Term</b> 10152122 10152174 10156101	9 cred Object-Oriented Programming 2 Collaborative Application Development Database Concepts and Design	3 3 3
<b>Term</b> 10801136 10804107	6-7 cred English Composition 1  College Mathematics  -or-	3 3
10804118	Intermediate Algebra with Applications 🗹	4
<b>Term</b> 10152159 10801196 10801198	6 cred User Experience Design Oral/Interpersonal Communication & -or- Speech &	3 3
<b>Term</b> 10152155 10152160 10801197	Web Programming 1 2* Introductory Mobile Application Development Technical Reporting -or-	3
Term 10152158 10152161 10809166	Introductory Statistics &  9 cred  Web Programming 2 Intermediate Mobile Application Development Intro to Ethics: Theory & Application &	3
<b>Term</b> 10152175 10156102 10809188 10809198	Software Architecture SQL Development Developmental Psychology & -or- Intro to Psychology &	3 3 3
<b>Term</b> 10152123 10152176	Object-Oriented Programming Application Development Capstone	3 3
	Total credits 63-	64

# **Application Development Capstone**

10152176.....3 credits

Learners form self-directed Agile teams working with a client where each team will be responsible for identifying, designing, and implementing a software application. Teams will manage their projects, communicate project status, adapt to changing requirements, and overcome technical challenges. Students will build their application leveraging the Atlassian suite of products to manage their project. Additional topics: Agile software development methodology and team-based communication.

Prerequisites: Software Architecture 10152175, Web Programming 1 10152155, SQL Development 10156102, and Introductory Mobile Application 10152160

# **Collaborative Application Development** 10152174 ......3 credits

Introduces the Agile software development methodology and applies it to managing software development projects using the Atlassian suite of products. Students will work in small teams developing web-based applications. Additional topics: gathering requirements, team rules, peer evaluations, code reviews, pair programming, stakeholder and team communication, project management, version control, unit testing, licensing, and build automation. Prerequisites: Web Design 1 10152150, Intro to Programming 10152101 Corequisite: Oral/Interpersonal Communication 10801196

# College Mathematics &

10804107 ......3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Database Concepts and Design**

10156101 .....3 credits

Introduces the concepts of relational database design, development, and maintenance. Topics include relational normalization, referential integrity, and Structured Query Language (SQL).

# Developmental Psychology &

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# English Composition 1 2

10801136 ......3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intermediate Algebra with Applications & 10804118 ..... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intermediate Mobile Application Development 10152161 .....3 credits

Provides instruction in developing software applications for mobile devices building upon the knowledge gained in Introductory Mobile Application Development. Prerequisite: Introductory Mobile Application Development 10152160

# Intro to Ethics: Theory & Application & 10809166 .....3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decisionmaking process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Programming 2

10152101 ......3 credits Applies the basic concepts of computer programming

using a modern development language, while learning to work in a Windows PC environment. Programming work emphasizes basics of structured programming, debugging, and testing by having learners create, update, and repair applications. Additional topics include online software development resources, Microsoft Windows and other PC tools, programming and documentation standards, variable lifetime/scope, data types, control structures and mathematical calculations

# Intro to Psychology &

10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Introductory Mobile Application Development** 10152160 .....3 credits

Provides instruction in developing software applications for mobile devices using the Microsoft Visual Studio and Xamarin

Prerequisite: Object-Oriented Programming 2 10152122. Database Concepts and Design 10156101 or consent of instructor

# Introductory Statistics &

10804189 .....3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers. perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent.

# Object-Oriented Programming 1 2 10152121.....3 credits

Introduces object-oriented programming and design, with a focus on building the conceptual framework necessary to understand and build object-oriented programs. This course uses C# .NET, and the Unified Modeling Language (UML), to present concepts from a variety of perspectives. Learners will create UML diagrams and write/debug C# .NET applications, applying the object-oriented basics of abstraction, encapsulation, inheritance and polymorphism. Additional topics include: object instantiation/lifetime/ scope, methods, properties, visibility modifiers and collections/multiplicity.

Corequisites: Intro to Programming 10152101

# **Object-Oriented Programming 2**

10152122.....3 credits

Builds upon the object-oriented concepts learned in Object-Oriented Programming 1, continuing with an indepth application of object-oriented design principles and patterns. Focus is put on SOLID principles of OO development, and coding to abstraction, utilizing Factory, Strategy, and Observer patterns. Additional topics include delegates, iterators, and data structures. Prerequisite: Object-Oriented Programming 1 10152121

# **Object-Oriented Programming** 10152123......3 credits

Builds upon the object-oriented concepts learned in earlier OOP courses. Learners will spend time building JAVA applications and describing many of the common OOP design patterns they are utilizing, including: factory, strategy, observer, decorator, state, singleton, adapter, facade, command, and more.

Prerequisite: Object-Oriented Programming 2 10152122

# Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Software Architecture**

10152175 ......3 credits

Introduces N-tier software architecture where learners work in Agile teams to create and deploy ASP.NET applications comprised of data access, business, and presentation layers using MVC architecture. The application will access data from a relational database. Additional topics include: Agile project management, version control, authentication, authorization, and consuming web services.

Prerequisites: Collaborative Application Development 10152174, Object-Oriented Programming 2 10152122, Database Concepts and Design 10152156

# Speech 🗷

# 10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

# SQL Development

# 10156102 ......3 credits

Expands on Database Concepts and Design, with advanced SQL syntax (indexes, views, stored procedures, and triggers), database design, and data transformation. Additional topics include alternate database technologies, data warehousing, emerging database trends, and database administration and security.

Prerequisites: Database Concepts and Design 10156101, Introduction to Programming 10152101 Corequisite College Math 10804107

# **Technical Reporting**

# 10801197 .....3 credits

The student prepares and presents oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course.

Prerequisite: English Composition 1 10801136 with a grade of "C" or better or Written Communication 10801195 with a grade of "C" or better. Proficiency in wordprocessing skills recommended.

# User Experience Design

### 10152159.....3 credits

Examines the design, prototyping, and evaluation of user interfaces. Learners will apply user experience standards in the development of web and software interfaces to provide a quality user experience. Topics include psychological and interaction principles (including ADA and international standards), requirements analysis, designing for different devices, style guides, usability testing, and visual design principles.

Corequisite: Web Design 1 10152150

# Web Design 1 🗹

10152150 ......3 credits

Introduces HTML and Cascading Style Sheets (CSS) coding techniques. Learners will create/modify web pages using HTML tags and style the web pages with CSS and JavaScript. For the final course project, learners will create a personal website portfolio. Additional topics include copyright considerations, text editors, image optimization, FTP utilities, and browser tools.

# Web Programming 1

10152155.....3 credits

Provides instruction in php to teach students how to develop full-stack web applications. Students will work with the following languages/technologies: PHP, HTML, CSS, JavaScript, jQuery, SQL, and bootstrap. Additional topics include Object-Orientation and MVC.

Prerequisites: Database Concepts and Design 10156101, Collaborative Applications Development 10152174, and Object Oriented Programming 1 10152121

# Web Programming 2

10152158.....3 credits

Students will learn how to develop applications using Angular and NOSQL using Mongo. Additional topics include type script, templates, binding, form controls, and other front-end development frameworks.

Prerequisites: Web Programming 1 10152155, Collaborative Application Development 10152174



# LEADERSHIP DEVELOPMENT

# Associate in Applied Science (AAS) Program Code: 10-196-1 **Total Credits: 60-61**

Designed for individuals currently employed and working closely with their employer on skill development, Mid-State's Leadership Development program prepares students for success in effectively managing processes and inspiring a diverse workforce. In this program you'll develop the technical and interpersonal skills needed to lead the operations of a business including helping organizations adapt to change, encouraging innovation, displaying a variety of effective leadership skills, demonstrating critical-thinking skills, and using communication skills appropriate in a professional and collaborative environment. You'll grow your skills in planning, finance, team building, leadership, safety, project management, decision making, talent development, supervision, innovation, and the use of software. Every course directly applies learning to the student's real-world work environment through various projects. As a graduate of the Leadership Development associate degree, you'll be prepared for leadership roles in any organization.

**Estimated tuition and fees:** mstc.edu/programcosts

# **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

# CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s) Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

With:

When:\_\_\_

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





**ADAMS CAMPUS** 401 North Main Adams, WI 53910

**MARSHFIELD CAMPUS** 2600 West 5th Street

STEVENS POINT CAMPUS 1001 Centerpoint Drive

WISCONSIN RAPIDS CAMPUS 500 32nd Street North

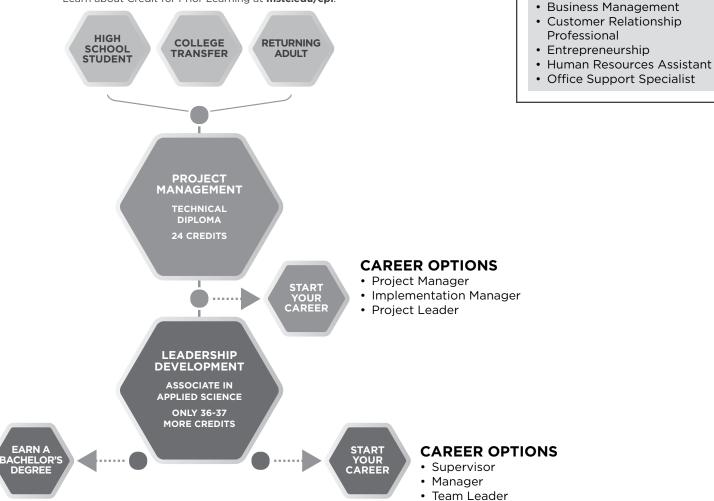
Marshfield, WI 54449 Stevens Point, WI 54481 Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **BACHELOR'S DEGREE OPTIONS**

Herzing University and Indiana Wesleyan University

For more information and additional opportunities, visit mstc.edu/transfer.

**OTHER OPTIONS** 

**RELATED PROGRAMS** 

• Administrative Professional

### **PROGRAM OUTCOMES**

Employers will expect you, as a Leadership Development graduate, to be able to:

- Utilize quality strategies and tactics.
- Apply effective leadership skills.
- · Apply human resource policies and procedures.
- Perform supervisory management functions to achieve organizational objectives.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Workplace Innovation course.

NOTES:			

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# SAMPLE FULL-TIME CURRICULUM OPTION

Term	15-16 cred	
10102121 10103106	Finance and Budgeting* & Microsoft Office-Introduction* &	3 3
10196190	Leadership Development*	3 3 3
10804107	College Mathematics* 🗹	3
10804118	Intermediate Algebra with Applications 2	4
10804189	Introductory Statistics 🕝	3
10809166	Intro to Ethics: Theory & Application*	3
Term	15 cre	dits
10102214	Continuous Improvement	3
10196188 10196189	Project Management* Team Building & Problem Solving*	3 3 3
10801136	English Composition 1* &	3
10809172	Introduction to Diversity Studies* 🗷 -or-	
10809122 10809196	Intro to American Government <b>C</b> -or-	3
10809196	Intro to Sociology 🗹	3
Term	15 cred	dits
10196136 10196191	Managing Risk & Safety*	3
10196191	Supervision* & Managing for Quality*	3 3 3 3
10546110	Mental Wellness and Stress Management*	3
10801196	Oral/Interpersonal Communication* & -or-	7
10801198	Speech 🗷	3
Term	15 cred	dits
10196135	Conflict Resolution*	3
10196138 10196139	Training & Talent Development* Workplace Innovation	3 3 3
10623171	Lean Six Sigma*	3
10809198	Intro to Psychology* 🗹 -or-	7
10809188	Developmental Psychology 🗷	3
	Total credits 60	-61

- \* This course may also be offered in a different term including during winterim or summer terms, with 3-week, 8-week, or 16-week sessions available. A variety of modalities and class lengths may be available, including online, hybrid, TelePresence, or face to face.
- This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- Students complete a full-time course load over a 16-week term. This term may include a combination of classes taken in an 8-week session and classes taken over the full 16-week term.
- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

# SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10103106 10196190 10804107	Microsoft Office-Introduction*   Leadership Development*  College Mathematics*	O credits 3 3 3
10804118	-or- Intermediate Algebra with Application-or-	ons 🗹 4
10804189	Introductory Statistics &	3
<b>Term</b> 10196188 10196189 10801136	Project Management* Team Building & Problem Solving* English Composition 1* 🗗	9 credits 3 3 3
<b>Term</b> 10102121 10546110 10809166	Finance and Budgeting*  Mental Wellness and Stress Manager Intro to Ethics: Theory & Application	
<b>Term</b> 10102214 10809172 10809196	Continuous Improvement Introduction to Diversity Studies*  Intro to American Government  -or Intro to Sociology  -or	
<b>Term</b> 10196136 10196191	Managing Risk & Safety* Supervision* 💅	6 credits 3 3
<b>Term</b> 10196138 10809198 10809188	Training & Talent Development* Intro to Psychology* & -or- Developmental Psychology &	6 credits 3
<b>Term</b> 10196192 10801196 10801198	Managing for Quality* Oral/Interpersonal Communication* Speech &	6 credits 3 <b>2' -or-</b> 3
<b>Term</b> 10196135 10196139 10623171	Conflict Resolution* Workplace Innovation Lean Six Sigma*  Total cred	9 credits 3 3 3 3
	Total Cred	aits 00-01

# College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Conflict Resolution**

10196135.....3 credits

Students will apply different conflict resolution techniques that can be used by a manager or leader within an organization given real-world scenarios. Students will also evaluate the importance of consultation, team building, trust, and win-win outcomes from a managerial standpoint in the resolution of organizational conflict.

# **Continuous Improvement**

10102214 ......3 credits

Emphasizes using data to make sound business decisions. Students gain exposure to various tools used to assemble, organize, and manage data sets. Students further refine their skills in requirements documentation and validation by tracing and prioritizing solution requirements. Students also identify, measure, and validate solution requirements to support organizational change while complying with organizational standards.

Prerequisite: Business Analyst Essentials 10102210 or admission to Leadership Development Program 101961

# Developmental Psychology ☑

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# English Composition 1 2

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

# Finance and Budgeting 🗹

10102121 .....3 credits

For the nonfinancial manager, this course introduces the language of accounting, finance, and budgeting. Provides an overview of the use and analysis of financial statements. Business planning and the foundations and development of budgets are explored. Business financing basics and the securing of necessary financing for a business are covered. Practical application of financial statement creation and analysis, budgetary activities, and finance calculations are included.

# Intermediate Algebra with Applications & 10804118 ...... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions. Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 263 and QAS 234 or ACT of 19 or QAS of 245, or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to American Government & 10809122......3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Ethics: Theory & Application © 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Psychology &

10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Sociology ©

and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Introduction to Diversity Studies © 10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Introductory Statistics 🗷

10804189 ......3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Leadership Development

10196190 ......3 credits

Applies skills and tools necessary to fulfill his/her role as a modern leader. Each learner evaluates personal leadership effectiveness, use individual and group motivation strategies, implement mission and goals, demonstrate ethical behavior, adapt personal leadership style to worker readiness, use power, facilitate employee development, coach, manage change, and resolve conflict.

# Lean Six Sigma

10623171.....3 credits

Learners will examine two models of problem solving/continuous improvement (the PDCA/PDSA and the DMAIC models). Learners will utilize an A3 report to identify the current process condition, identify improvement goals, establish root causes, specify improvement activities, and confirm results. Learners will utilize the seven SPC (Statistical Process Control) tools and selected Quality Management Tools in the improvement process. Learners will examine the steps of planning and executing a Kaizen Event as well as supporting daily Kaizen activities. Prerequisite: Admission to Manufacturing Operations Management program 101965 or Leadership Development program 101961

# Managing for Quality

10196192.....3 credits

Apply skills and tools necessary to implement and maintain a continuous improvement environment. Each learner will demonstrate the application of a personal philosophy of quality, identify stakeholder relationships, identify ways to meet/exceed customer expectations, apply a systems-focused approach, use quality models and tools, manage a quality improvement project, and measure effectiveness of continuous improvement activities.

# Managing Risk & Safety

10196136 .....3 credits

This course is designed for students to understand the basics concepts of risk assessment, risk mitigation, workplace hazards, and safety practices. Students will examine personal, physical, environmental, and virtual safety policies and practices as part of this course.

# **Mental Wellness and Stress Management** 10546110 ......3 credits

Investigate the underpinnings of mental health and wellness. Explore the risks of stress and emotional management techniques to mitigate these risks by embracing a growth mindset. The learner will be engaged in processes to support the emotional dimension of health and demonstrate ways to implement these practices for oneself and others along their wellness journey.

# Microsoft Office-Introduction & 10103106 ......3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse, and Windows 10 skills. Students may develop these skills in the LiNK while concurrently

# Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Project Management**

enrolled in this course.

10196188.....3 credits

Applies skills and tools necessary to design, implement, and evaluate formal projects. Each learner will examine the role of project management, create a project charter, define project work scope, manage project risks, and develop a network diagram, project schedule, and project budget. Prerequisite: Nine core credits from a 102, 103, 109, 196, or 623 program code.

# Speech 2

10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Pre-requisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Supervision 2

10196191 .....3 credits

Applies skills and tools necessary to perform the functions of a contemporary frontline leader. Students engage in operational planning, analyze organizational structures, review the staffing process, employ techniques to enhance employee personal and group effectiveness, and develop control techniques to measure effectiveness in the above areas.

# **Team Building & Problem Solving** 10196189 .....3 credits

Applies skills and tools necessary to facilitate problem solving in a team environment. Each learner assumes the roles and responsibilities of team leadership in the stages of team development, uses a systematic problem-solving process, and employs consensus-building and conflict-management strategies.

# **Training & Talent Development** 10196138.....3 credits

This course provides an understanding of the importance of ongoing training and talent development of individuals. teams and organizations. Students will learn how to conduct a needs analysis at the organizational, task and person level, develop training objectives, design training content, implement training and evaluate the training process. Students will also explore talent development for retention and succession planning, as well as the importance of managing diversity training and emerging training technologies.

# **Workplace Innovation** 10196139.....3 credits

This capstone course is designed to inspire innate creativity to help launch major projects or untangle difficult situations. It focuses on providing fresh insight and new perspective on even the most routine elements of any job and to view problem solving as a creative opportunity. Students will tackle real-world workplace issues and learn to create innovative and workable solutions for the good of the organization.

Prerequisite: Eighteen credits of 196 core courses



# **MANUFACTURING OPERATIONS MANAGEMENT**

Associate in Applied Science (AAS) **Program Code: 10-196-5** 

**Total Credits: 60** 

The Manufacturing Operations Management program is designed to help those with some prior experience in manufacturing advance into management positions. Graduates are prepared to supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators. Supply chain, automation, quality, lean leadership, and supervisory skills are all emphasized along with creative problem solving and team building. Students in the program will have opportunities to explore manufacturing facilities where they will analyze manufacturing operations, identify process efficiencies, and identify management strategies leading to quality production and processing.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

### CHECKLIST:

This section will be completed when meeting with your academic advisor.

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- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





1001 Centerpoint Drive

Stevens Point, WI 54481

WISCONSIN RAPIDS CAMPUS

MID-STATE

ADAMS CAMPUS 401 North Main Adams, WI 53910

MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449

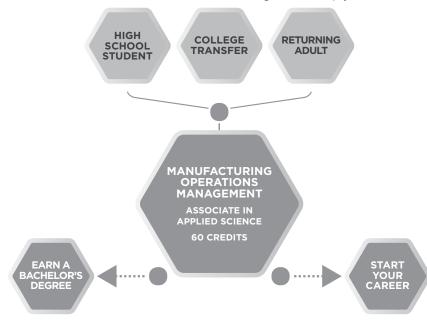
500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



# **OTHER OPTIONS**

### **RELATED PROGRAMS**

- Industrial Mechanical Technician
- Precision Machining Technician
- · Stainless Steel Welding
- Welding

# **CAREER OPTIONS**

- Manufacturing Supervisor
- Production Manager
- Quality Assurance Supervisor

# **BACHELOR'S DEGREE OPTIONS**

UW-Platteville.

For more information and additional opportunities, visit mstc.edu/transfer.

### **PROGRAM OUTCOMES**

Employers will expect you, as a Manufacturing Operations Management graduate, to be able to:

- Organize resources to achieve the goals of the organization.
- Direct individuals and/or processes to meet organizational goals.
- Implement safe work practices.
- Design, implement, and evaluate industrial processes.
- Apply leadership skills and tools to facilitate problem solving.
- Develop and maintain a continuous improvement environment.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

# **NOTES:**

### STUDENT HANDBOOK

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### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10196189	Team Building & Problem Solving	edits 3
10196191 10623126	Supervision <b>&amp; -or-</b> Manufacturing Supervision	3
10462107	Industrial Safety &	2
10623114	Intro to Inventor	1
10801136	English Composition 1 🗹	3
10804107 10804189	College Mathematics <b>&amp; -or-</b> Introductory Statistics <b>&amp;</b>	3
Term	15 cr	edits
10102110	Employment Law	3
10102121	Finance and Budgeting & -or-	
10623124	Budgets & Economic Impact for Manufactu	ring 3
10103123 10623112	Excel-Beginning &  Manufacturing Practices	2
10801196	Oral/Interpersonal Communication & -or-	_
10801198	Speech 2	3
10809166	Intro to Ethics: Theory & Application 🗹	3
Term	15 cr	edits
10196190	Leadership Development	3
10196193	Human Resource Management	3 3
10605117 10623169	Automation 1 - Beginning PLC	3
10623169	Manufacturing Operations Management Internship	3
10809188	Developmental Psychology & -or-	J
10809198	Intro to Psychology &	3
Term	15 cr	edits
10102131	Entrepreneurial Management	3
10196192	Managing for Quality <b>-or-</b>	
10623125	Quality Management for Manufacturing	3
10623132	Project Management for Manufacturing	3
10623171 10809172	Lean Six Sigma Introduction to Diversity Studies   **Table 1.1**  **Table 1.1**  **Table 2.1**  **Table 2.1**	3 3 3 3
10003172	introduction to Diversity Studies E	3
	Total credi	ts 60

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

# SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10462107 10623114 10801136	Industrial Safety & Intro to Inventor English Composition 1 &	6 credits 2 1 3
<b>Term</b> 10103123 10804107 10804189 10623112	Excel-Beginning & College Mathematics & -or- Introductory Statistics & Manufacturing Practices	6 credits 1 3 2
<b>Term</b> 10196189 10196191 10623126 10809166	Team Building & Problem Solving Supervision & -or- Manufacturing Supervision Intro to Ethics: Theory & Application	9 credits 3 3 2 3
<b>Term</b> 10102110 10102121 10623124 10801196 10801198	Employment Law Finance and Budgeting & -or- Budgets & Economic Impact for Manu Oral/Interpersonal Communication & Speech &	
<b>Term</b> 10196190 10196193 10809188 10809198	Leadership Development Human Resource Management Developmental Psychology & -or- Intro to Psychology &	9 credits 3 3
<b>Term</b> 10196192 10623125 10809172	Managing for Quality <b>-or-</b> Quality Management for Manufactur Introduction to Diversity Studies &	6 credits ing 3 3
<b>Term</b> 10605117 10623169	Automation 1 - Beginning PLC Manufacturing Operations Managem Internship	6 credits 3 ent 3
<b>Term</b> 10102131 10623132 10623171	Entrepreneurial Management Project Management for Manufactur Lean Six Sigma	<b>9 credits</b> 3 ing 3 3
	Total	redits 60

# Automation 1 - Beginning PLC

10605117 .....3 credits

An overview of programmable logic controllers (PLCs) that provides a foundation of knowledge of the programming techniques, operation, and maintenance of PLCs used in typical industrial automation.

# Budgets & Economic Impact for Manufacturing 10623124......3 credits

Students will study the language of budgets and fiscal management as it relates to the manufacturing industry. Provides an overview of the use and analysis of financial statements. Students will study the impact of current and historical economics and how they have a role in successful business planning.

# College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Developmental Psychology ©

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Employment Law**

10102110 ......3 credits

Introduces a broad scope of employment laws and provides the opportunity to apply these laws to the employment arena. Includes laws relating to anti-discrimination, including the Civil Rights Act, ADEA, and ADA; wage and hour regulation, including FLSA; employer-provided pensions, including ERISA; health insurance, including COBRA and ACA; and unemployment and worker's compensation insurance.

# English Composition 1 🗷

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

# **Entrepreneurial Management**

10102131 .....3 credits

Introduces students to the concept of entrepreneurship. Learners study entrepreneurial practices primarily by developing a business plan for a venture of their choice. This includes comparing ways of going into business as well as developing marketing, legal, financial, products/services, management, and operations plans for a small business of their choice. Entrepreneurial behavior within companies is examined.

Prerequisite: Twelve Business Management 10-102 credits or twelve Supervisory Management 10-196 credits or a combination of Business Management 10-102 and Supervisory Management 10-196 credits that total twelve.

# Excel-Beginning ©

10103123.....1 credit

Students learn to create, modify, and format spreadsheets, charts, and graphics. Students also learn to perform calculations and analysis on data.

# Finance and Budgeting 🗷

10102121 ......3 credits

For the nonfinancial manager, this course introduces the language of accounting, finance, and budgeting. Provides an overview of the use and analysis of financial statements. Business planning and the foundations and development of budgets are explored. Business financing basics and the securing of necessary financing for a business are covered. Practical application of financial statement creation and analysis, budgetary activities, and finance calculations are included.

# **Human Resource Management** 10196193.....3 credits

Applies skills and tools necessary to perform human resource functions in an organization. Each learner demonstrates skill in following EEOC laws; writing job descriptions; recruiting, selecting, and orienting employees; developing policies and procedures; developing and conducting training; designing performance appraisal plans: developing employee development plans; and selecting compensation and benefit strategies.

# Industrial Safety &

10462107 .....2 credits

Provides an overview of safety, health, and environmental issues as they relate to industry. Various types of hazards and the controls and equipment used to reduce risks from hazards are discussed. Focuses on understanding the Occupational Safety and Health Administration (OSHA) and its function as well as other regulatory and enforcement agencies associated with industrial safety, health, and the environment.

# Intro to Ethics: Theory & Application & 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Inventor

10623114 .....1 credit

Learners will create 3D models in Inventor using a variety of feature and modify tools, analyze the volume of the models, and apply a material to determine weight of the finished product. Learners will generate 2D representations of the 3D model inappropriate views, and add dimensions and annotations before formatting drawings to print out. Prior experience with computers is recommended.

# Intro to Psychology &

10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Introduction to Diversity Studies &

10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender. class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Introductory Statistics & 10804189 ......3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers. perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: High School GPA of 3.0 or Accuplacer QAS 241 or ACT of 19 or Pre-Algebra 10834109 with a grade of "C" or better or College Math 10804107 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# **Leadership Development**

10196190 ......3 credits

Applies skills and tools necessary to fulfill his/her role as a modern leader. Each learner evaluates personal leadership effectiveness, use individual and group motivation strategies, implement mission and goals, demonstrate ethical behavior, adapt personal leadership style to worker readiness, use power, facilitate employee development, coach, manage change, and resolve conflict.

# **Lean Six Sigma**

10623171.....3 credits

Learners will examine multiple problem solving and continuous improvement models. Learners will utilize reporting methods to identify the current process condition. identify improvement goals, establish root causes, specify improvement activities, and confirm results. Learners will utilize SPC (Statistical Process Control) tools and selected quality management tools in the improvement process. Prerequisite: Admission to Manufacturing Operations Management program 101965 or Leadership Development program 101961

# Managing for Quality

10196192.....3 credits

Apply skills and tools necessary to implement and maintain a continuous improvement environment. Each learner will demonstrate the application of a personal philosophy of quality, identify stakeholder relationships, identify ways to meet/exceed customer expectations, apply a systemsfocused approach, use quality models and tools, manage a quality improvement project, and measure effectiveness of continuous improvement activities.

# Manufacturing Operations Management Internship 10623169......3 credits

This internship provides students with practical knowledge and experience in the manufacturing industry through the lens of supervisors and managers. Integrating the theories and techniques learned in previous courses with specific off-campus occupational experiences at selected training sites allows students to gain a real-world perspective of this segment of the manufacturing industry.

# Manufacturing Practices

10623112.....2 credits

As competition for market share continues to increase, manufacturers rely on innovations in technology, methods, and practices to give them the edge they need. To remain competitive globally, the watchwords are productivity, efficiency, and quality. In this course, students examine some of the practices that many manufacturing operations have come to rely on to make their operations competitive, efficient, and cost-effective. Topics covered in this class include the principles of lean manufacturing, value versus non-value added waste, 5S methodology, value stream mapping, setup reduction and quick changeover, cellular flow, building a lean culture, total productive maintenance, and statistical process control (SPC).

# **Manufacturing Supervision**

10623126.....3 credits

Applies skills and tools necessary to perform the functions of a supervisor in a manufacturing field. Students engage in operational planning, analyze organizational structures, review the staffing process, study techniques that enhance personal and group functionality, and develop techniques to measure production and effectiveness of teams.

# Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Project Management for Manufacturing 10623132 ......3 credits

Offers a systematic approach to coordinating, scheduling, and controlling activities, people, and resources during short-term and long-term projects. Some of the tools presented include Work Breakdown Structures, Activity Diagrams, and Gantt Charts.

# Quality Management for Manufacturing 10623125 ......3 credits

Apply skills and tools necessary to implement and maintain a continuous improvement environment in the manufacturing industry. Learners will study philosophies of quality controlled environments, identify key industry stakeholder relationships, determine methods to meet customer and employee expectations, apply a process and systems focused approach, and manage a quality improvement project.

# Speech 🗹

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Pre-requisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Supervision 🗹

10196191 ......3 credits

Applies skills and tools necessary to perform the functions of a contemporary frontline leader. Students engage in operational planning, analyze organizational structures, review the staffing process, employ techniques to enhance employee personal and group effectiveness, and develop control techniques to measure effectiveness in the above areas.

# Team Building & Problem Solving 10196189 ......3 credits

Applies skills and tools necessary to facilitate problem solving in a team environment. Each learner assumes the roles and responsibilities of team leadership in the stages of team development, uses a systematic problem-solving process, and employs consensus-building and conflict-management strategies.



# MEDICAL ASSISTANT

**Technical Diploma** 

Program Code: 31-509-1

**Total Credits: 32-33** 

Mid-State's Medical Assistant program prepares graduates to work confidently in medical offices and clinics, assisting in the reception, examination, and treatment of patients. You'll learn valuable clinical and clerical skills as well as how to sterilize equipment and perform lab procedures, EKGs, and injections. The program's combination of classroom instruction and clinical practicum at a variety of area medical offices and clinics provides comprehensive, cognitive (knowledge), psychomotor (skills), and affective (behavior) preparation. Successful graduates are eligible to write one of two voluntary national certification exams for medical assistants.

Estimated tuition and fees: mstc.edu/programcosts

# **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Criminal Background Statement of Understanding and Release of Information Form

Other:				

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

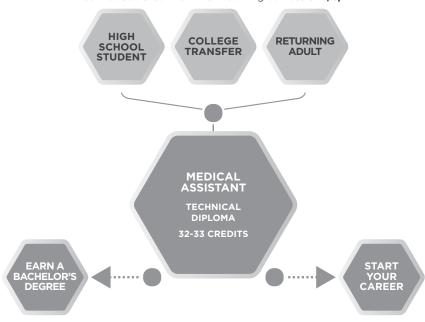
500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



# **OTHER OPTIONS**

### **RELATED PROGRAMS**

- Central Service Technician
- Health & Wellness Promotion
- Health Information Management
- Medical Coder
- Nursing
- Nursing Assistant
- Pharmacy Services Management
- Pharmacy Technician
- Phlebotomy Technician
- Respiratory Therapy
- Surgical Technologist

# **CAREER OPTIONS**

- Appointment Clerk (Medical/Dental)
- Medical Assistant
- Medical Records Clerk

# **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

### **PROGRAM OUTCOMES**

Employers will expect you, as a Medical Assistant graduate, to be able to:

- · Perform medical office administrative functions.
- Provide patient care in accordance with regulations, policies, laws, and patient rights.
- Perform medical laboratory procedures.
- Demonstrate professionalism in a health care setting.
- Demonstrate safety and emergency practices in a health care setting.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students who successfully complete Medical Assistant Clinical Procedures 2 and Medical Assistant Laboratory Procedures 2 will meet the TSA requirements.

This program prepares competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. This program is accredited by the Commission on Accreditation of Allied Health Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

### Commission on Accreditation of Allied Health Education Programs

9355 113th St. N, #7709, Seminole, FL 33775 Phone: 727.210.2350 • www.caahep.org

# **ADDITIONAL ENTRY CRITERIA**

To apply to the Medical Assistant program, please submit the following documents to Mid-State Admissions:

 Criminal Background Statement of Understanding and Release of Information form.

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

# **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a medical assistant is available at **mstc.edu/programs/medical-assistant**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

# **CLINICAL-RELATED REQUIREMENTS**

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.

### PROGRAM PROGRESSION AND COMPLETION

In order to maintain a passing status and progress in the program, students must:

- Repeat courses not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of "C" or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability in courses. Students may be required to apply for program re-entry in order to repeat courses within the program's instructional area.

NOTES:		

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success ☑

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading

10838104 .....2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

# Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

# SAMPLE FULL-TIME CURRICULUM OPTION

Term	18-19 credi	ts
10501101	Medical Terminology 🗹	3
10501104	Culture of Healthcare	2
10501107	Digital Literacy for Healthcare 🗹	2
31509301	Medical Assistant Administrative Procedures	2
31509302	Human Body in Health & Disease	3
	-or-	
10806177	General Anatomy & Physiology 🗹	4
		_
	Medical Assistant Laboratory Procedures 1	2
31509304	Medical Assistant Clinical Procedures 1	4
Томи	14 credi	٠.
Term	1 1 51 5 51	-
10501108	Pharmacology for Allied Health &	2
10501109	Medical Law, Ethics, and Professionalism	2
31509305	Medical Assistant Laboratory Procedures 2	2
31509306	Medical Assistant Clinical Procedures 2	3
31509307	Medical Office Insurance and Finance	2
31509310	Medical Assistant Practicum	3
	Total credits 32-3	33

☑ This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

### SAMPLE PART-TIME CURRICULUM OPTION

Term	6-7 credi	ts
10501101	Medical Terminology 🗹	3
31509302	Human Body in Health & Disease	3
	-or-	
10806177	General Anatomy & Physiology 🗹	4
Term	6 credi	ts
10501104	Culture of Healthcare	2
10501107	Digital Literacy for Healthcare	2
10501108	Pharmacology for Allied Health 🕏	2
Term	10 credi	te
10501109	Medical Law, Ethics, and Professionalism	2
31509301	Medical Assistant Administrative Procedures	2
31509301	Medical Assistant Laboratory Procedures 1	2
31509304	Medical Assistant Clinical Procedures 1	4
	_	
Term	10 credi	
31509305	Medical Assistant Laboratory Procedures 2	2
31509306	Medical Assistant Clinical Procedures 2	3
31509307	Medical Office Insurance and Finance	2
31509310	Medical Assistant Practicum	3
	Total credits 32-	33

# **Culture of Healthcare**

10501104.....2 credits

An introduction to the culture of healthcare for students interested in working in various healthcare settings. Learners examine professionalism, interpersonal and written communication skills, problem-solving skills and patient privacy and confidentiality issues as they relate to healthcare.

# Digital Literacy for Healthcare & 10501107 ......2 credits

The focus of this course is the use of technology in healthcare. Learners use common business software applications, including word processing, presentation, spreadsheet, and databases. Communication methods using technology are addressed. Learners gain experience with using the electronic health record (EHR). Healthcare EHR security issues, social media use, and digital healthcare resources are examined.

# General Anatomy & Physiology & 10806177...... 4 credits

they do not meet these requirements.

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236 or ACT of 15. or General Chemistry 10806134 with a grade of "C" or better, or General Biology 10806114 with a grade of "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better. Students are encouraged to bring transcripts for further evaluation if

# **Human Body in Health & Disease** 31509302.....3 credits

Focuses on diseases that are frequently first diagnosed and treated in the medical office setting. Students learn to recognize the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis and prevention of common diseases.

# **Medical Assistant Administrative Procedures** 31509301.....2 credits

Introduces medical assistant students to office management, business administration, and the electronic medical record (EMR) in the medical office. Students learn to schedule appointments, perform filing, record keeping. telephone and reception duties, communicate effectively with patients and other medical office staff, and keep an inventory of supplies.

Prerequisite: Admission to Medical Assistant program 315091

# **Medical Assistant Clinical Procedures 1** 31509304...... 4 credits

Introduces medical assistant students to clinical procedures performed in the medical office setting. Students perform basic examining room skills, including screening, vital signs, patient history, minor surgery, and patient preparation for routine and specialty exams in the ambulatory setting. Learner explores communication principles and psychology theories related to patient care.

Prerequisite: Admission into Medical Assistant program 315091; Corequisite: Medical Assistant Laboratory Procedures 1 31509303

# **Medical Assistant Clinical Procedures 2** 31509306.....3 credits

Prepares medical assistant students to perform patient care skills in the medical office setting. Students perform clinical procedures including administering medications, assisting with minor surgery, performing an electrocardiogram, assisting with respiratory testing, educating patients/ community, and maintaining clinical equipment in an ambulatory setting. Students learn preventive care and principles of nutrition.

Prerequisites: Medical Assistant Clinical Procedures 1 31509304, Medical Assistant Laboratory Procedures 1 31509303, Medical Terminology 10501101, and Human Body in Health and Disease 10509102; Corequisite: Medical Assistant Laboratory Procedures 2 31509305

# **Medical Assistant Laboratory Procedures 1** 31509303.....2 credits

Introduces medical assistant students to laboratory procedures commonly performed by medical assistants in a medical office setting. Students perform Clinical Laboratory Improvement Amendment (CLIA) waived routine laboratory procedures commonly performed in the ambulatory care setting. Students follow laboratory safety requirements and federal regulations while performing specimen collection and processing, microbiology and urinalysis testing. Prerequisite: Admission to Medical Assistant program 315091: Corequisite: Medical Assistant Clinical Procedures 1 31509304

# **Medical Assistant Laboratory Procedures 2** 31509305......2 credits

Prepares students to perform phlebotomy and Clinical Laboratory Improvement Amendment (CLIA) waived hematology, chemistry, immunology and laboratory procedures commonly performed by medical assistants in the ambulatory care setting.

Prerequisite: Medical Assistant Laboratory Procedures 1 31509303; Corequisite: Medical Assistant Clinical Procedures 2 31509306

# **Medical Assistant Practicum**

# 31509310.....3 credits

Requires medical assistant students to integrate and apply knowledge and skills from all previous medical assistant courses in actual ambulatory health care settings. Learners perform medical assistant administrative, clinical, and laboratory duties under the supervision of trained mentors to effectively transition to the role of a medical assistant. This is a supervised, unpaid, clinical experience. AAMA required Practicum - 160 minimum hours (AAMA minimum) up to 216 hours.

Prerequisites: Medical Assistant Laboratory Procedures 2 31509305 and Medical Assistant Clinical Procedures 2 31509306

# Medical Law, Ethics, and Professionalism 10501109......2 credits

Prepares students to display professionalism and perform within ethical boundaries in the healthcare setting. Students maintain confidentiality, examine legal aspects of the medical record, perform risk management procedures, and examine legal and bioethical issues.

# Medical Office Insurance and Finance 31509307 ......2 credits

Introduces medical assistant students to health insurance and finance in the medical office. Students perform bookkeeping procedures, apply managed care guidelines, and complete insurance claim forms. Students also use medical coding and managed care terminology to perform insurance-related duties.

Prerequisite: Admission to Medical Assistant program 315091; Corequisite: Medical Assistant Clinical Procedures 2 31509306.

# Medical Terminology &

# 10501101...... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Students practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

# Pharmacology for Allied Health &

# 10501108 ......2 credits

Introduces students to medication classification, basic pharmacology principles, and supplements. Students apply basic pharmacodynamics to identify common medications and calculate dosages in preparation for medication administration.



# **MEDICAL CODER**

**Technical Diploma** 

Program Code: 31-530-3

**Total Credits: 30** 

The Medical Coder program at Mid-State prepares students for entry-level work as medical coders in health care settings such as hospitals, physician offices, long-term care facilities, and more. Medical coders review medical documentation and assign diagnosis and procedure codes for the purposes of billing, quality improvement, statistical reporting, and medical research. In this program, you'll be introduced to reimbursement principles and build proficiency in assigning codes across all settings. After program completion, graduates may qualify to take the Certified Coding Associate (CCA) credentialing exam through American Health Information Management Association (AHIMA).

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where:

When:\_\_\_\_\_

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_

\_\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





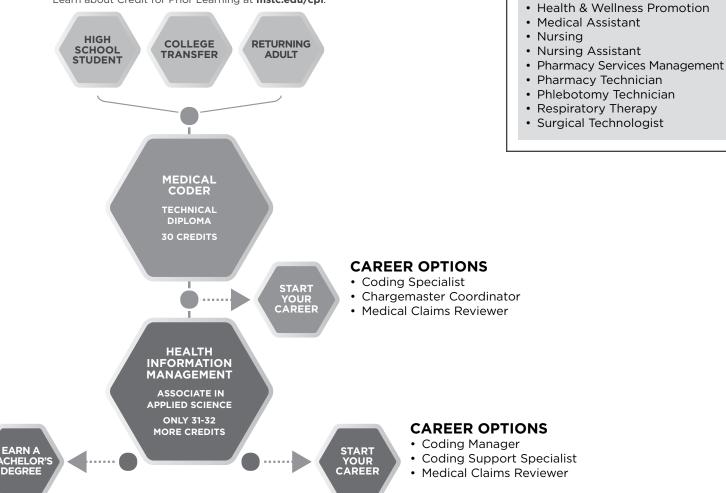
ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

500 32nd Street North Wisconsin Rapids, WI 54494

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), The College of St. Scholastica, University of Phoenix, UW-Green Bay, UW-La Crosse, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

OTHER OPTIONS

**RELATED PROGRAMS** 

· Central Service Technician

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Medical Coder graduate, to be able to:

- Apply clinical documentation and diagnostic results to ensure accurate diagnostic and procedural coding.
- Validate completeness and accuracy of health data for coding, billing, and statistical purposes.
- Evaluate components of revenue cycle management and clinical documentation improvement.

## **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a medical coder is at **mstc.edu/programs/medical-coder**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

## PROGRAM PROGRESSION AND COMPLETION

In order to progress in and successfully complete the program, students must:

- Repeat courses not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of "C" or better in all courses required for graduation.

A student may repeat the same course only once in the Medical Coder program. If the course is failed a second time, the student will be withdrawn from the Medical Coder program. If a Medical Coder student fails four separate program courses, the student will be withdrawn from the program. Failures will include failing the same course or failing different courses. A withdrawal grade of "W" counts as one attempt for the course.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success 2 10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

## ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

requirements at Mid-State.

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10103106 10501101 10530123 10806189	Microsoft Office Introduction & Medical Terminology & Introduction to Digital Information in Healthcare Basic Anatomy	<b>dits</b> 3 3 3
<b>Term</b> 10530144 10530182 10530197	9 cree CPT Coding Human Disease for the Health Professions ICD Diagnosis Coding	3 3 3
<b>Term</b> 10530146 10530147 10530166	9 cred Private and Government Reimbursement HIM Advanced Coding Inpatient Procedure Coding	3 3 3
	Total credits	30

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

## SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10501101 10530123	6 credit Medical Terminology & Introduction to Digital Information in Healthcare	<b>ts</b> 3
<b>Term</b> 10806189 10103106 10530182	Basic Anatomy Microsoft Office Introduction & Human Disease for the Health Professions	<b>ts</b> 3 3 3
<b>Term</b> 10530144 10530197	CPT Coding ICD Diagnosis Coding	<b>ts</b> 3 3
<b>Term</b> 10530146 10530147 10530166		<b>ts</b> 3 3 3
	Total credits 3	0

## **COURSE DESCRIPTIONS**

## **Basic Anatomy**

10806189 ......3 credits

Examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236 or ACT of 15. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **CPT Coding**

10530144 .....3 credits

Prepares learners to assign current procedural terminology (CPT) codes supported by medical documentation with entry-level proficiency. Students are familiar with and use standard coding references. Emphasizes accuracy, CPT instructional notations, conventions, rules, and official coding guidelines when assigning CPT codes to case studies and actual medical record documentation. Also covers application of modifiers to services and relationship to financial impact.

Prerequisites: Medical Terminology 10501101, Basic Anatomy 10806189, and Introduction to Digital Information in Healthcare 10530123; Coreguisite: Human Disease for the Health Professions 10530182

## **HIM Advanced Coding** 10530147.....3 credits

Builds on basic coding knowledge and skills through the coding of clinical case studies and actual medical records. Students access, review, and code electronic medical records from the virtual lab software; perform data quality reviews to validate code assignment and compliance with reporting requirements; develop appropriate physician queries; and assign diagnosis related groups (DRGs) and ambulatory payment classifications (APCs) with entry-level proficiency using computerized encoding and grouping software.

Prerequisites: ICD Diagnosis Coding 10530197 and CPT Coding 10530144; Coreguisites: Private and Government Reimbursement 10530146 and Inpatient Procedure Coding 10530166

## **Human Disease for the Health Professions** 10530182.....3 credits

Focuses on the common diseases of each body system as encountered in all types of healthcare settings by health information professionals. Emphasizes understanding the etiology (causes), signs and symptoms, diagnostic tests, and treatment (including pharmacologic) of each disease. Prerequisites: Medical Terminology 10501101 and Basic Anatomy 10806189

## ICD Diagnosis Coding

10530197.....3 credits

Prepares students to assign ICD diagnosis codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation.

Prerequisites: Medical Terminology 10501101, Basic Anatomy 10806189, and Introduction to Digital Information in Healthcare 10530123; Corequisite: Human Disease for the Health Professions 10530182

## Inpatient Procedure Coding

10530166.....3 credits

Prepares students to assign ICD procedure codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD procedure codes to case studies and actual medical record documentation.

Prerequisite: ICD Diagnosis Coding 10530197; Corequisites: Private and Government Reimbursement 10530146 and HIM Advanced Coding 10530147

# Introduction to Digital Information in Healthcare 10530123......3 credits

This introductory course examines the field of Health Information Management including the hardware and software systems used, common industry terminology, the security and ethical responsibilities of professionals in the field, and the current trends in the industry. Students will focus on accuracy and integrity of health data and confidentiality in this course.

Corequisite: 10501101 Medical Terminology

## 

10501101...... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Learners practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

## Microsoft Office-Introduction **☞**

10103106 .....3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse, and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

# Private and Government Reimbursement 10530146 ......3 credits

Introduces students to the vocabulary of private healthcare and government reimbursement. Students will identify and compare the varieties of private and government healthcare insurance including the advantages and disadvantages of each for the provider and for the policyholder. HIPAA guidelines are utilized throughout.

Prerequisites: ICD Diagnosis Coding 10530197 and CPT Coding 10530144; Corequisites: Inpatient Procedure Coding 10530166; HIM Advanced Coding 10530147



# MICROSOFT SYSTEM ADMINISTRATOR

**Technical Diploma** 

Program Code: 30-150-5

**Total Credits: 12** 

Managing and troubleshooting network environments based on the Windows Server operating system is a growing field of expertise in IT. Mid-State's Microsoft System Administrator program covers some of the newest and most rapidly expanding technologies in this area. We seek feedback from local employers to ensure course content is always up to date. As a result, you will have the skills and knowledge employers are looking for.

Estimated tuition and fees: mstc.edu/programcosts

## **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_

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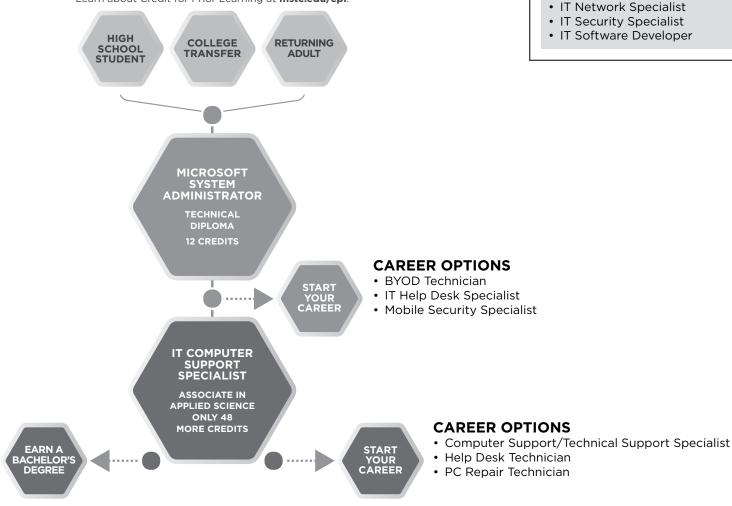
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## CAREER PATHWAY

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

OTHER OPTIONS

**RELATED PROGRAMS** 

• IT Computer Support Specialist

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Microsoft System Administrator graduate, to be able to:

- Analyze network performance and security.
- Automate local and remote network tasks using scripting.
- Manage virtual network environments.
- · Manage infrastructure services.
- · Manage deployment services.
- Manage active directory domain services.

## **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

NOTES:		

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

## **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success &

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10154102	IT Essentials 🗹	3 credits
<b>Term</b> 10150120 10150165	Server Administration-Beginning Network Server Scripting	6 credits 3 3
<b>Term</b> 10150121	Server Administration-Intermediate	3 credits
	Total	credits 12

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## **COURSE DESCRIPTIONS**

## IT Essentials 🗷

and BASH.

10154102 ......3 credits

An introduction course that aligns with the CompTIA A+certification. This class is designed to teach students how to build, configure, secure, network, and troubleshoot PCs.

## Network Server Scripting

Provides best practices and techniques in Linux and Windows shell and command line scripting using PowerShell

Prerequisite: IT Essentials 10154102

## Server Administration-Beginning

**10150120** ...... **3 credits** Develops skill in the design, installation, administration, and

management of computer networks. Topics include network design; installation and configuration of a commonly used network operating system; service packs and updated drivers; user accounts, groups, profiles, and policies; file system security; printer management; and application software installation, backup, and recovery.

Prerequisite: IT Essentials 10154102

# Server Administration-Intermediate 10150121 ......3 credits

Expands on the administration skills needed for successful management of a network operating system in a business environment. Topics include installation and configuration of a network operating system, monitoring and performance tuning, monitoring and analyzing network traffic, licensing, network devices, DNS, FTP, web services, and directory services.

Prerequisite: Server Administration-Beginning 10150120



# **NAIL TECHNICIAN**

**Technical Diploma** Program Code: 30-502-4 **Total Credits: 10** 

Mid-State's Nail Technician program prepares students to shape fingernails and toenails, remove unwanted skin and blemishes, apply polish and cosmetics to nails, and function as licensed manicurists or nail technicians/specialists. You'll learn manicuring theory; skin anatomy; nail growth, irregularities, and diseases; sterilization and sanitation; equipment and table maintenance; cuticle, blemish, and rough skin removal; nail filing, shaping, and polishing; cream application and extremity massage; nail sculpture and design art; product storage and use; customer service; laws and regulations; and business practices. You'll receive instruction and practice your new skills in our completely remodeled teaching/learning space and salon, which includes a room dedicated to nail technician students and nail services, with brand new manicure tables and pedicure thrones as well as equipment for acrylic and gel nail services.

Estimated tuition and fees: mstc.edu/programcosts

## **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- □ Other:

mstc.edu 888.575.6782 TTY: 711



STEVENS POINT CAMPUS 1001 Centerpoint Drive

WISCONSIN RAPIDS CAMPUS

MID-STATE

500 32nd Street North Stevens Point, WI 54481 Wisconsin Rapids, WI 54494

ADAMS CAMPUS 401 North Main Adams, WI 53910

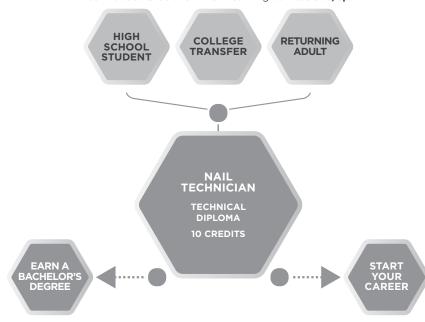
MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449

## **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **OTHER OPTIONS**

## **RELATED PROGRAMS**

- Barber Technologist
- Cosmetology

## **CAREER OPTIONS**

- · Nail Technician
- Manicurist
- Pedicurist

## **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### PROGRAM OUTCOMES

Employers will expect you, as a Nail Technician graduate, to be able to:

- Apply safety and sanitation procedures.
- Adhere to the current Wisconsin administrative codes and statutes for cosmetology/manicurist licensing.
- Demonstrate interpersonal skills for success.
- · Perform nail services.
- Develop strategies to market products and services.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will complete a mock board exam in the Manicurist Capstone course to fulfill the TSA requirement.

This program meets the Wisconsin state nail technician requirement of 300 hours of training and is regulated by the Wisconsin Department of Safety and Professional Services.

Students must purchase a kit comprised of required tools and supplies. The cost of the kit is approximately \$400.

## **TECHNICAL STANDARDS**

Students must have good fine motor skills, especially finger dexterity, as well as good hand-eye coordination and 20/40 vision in best eye with 70 degrees to each side for peripheral vision, as determined by the Department of Transportation.

## PROGRAM PROGRESSION

In order to progress in and successfully complete the program, students must repeat core courses (courses numbered 30-502-xxx and 31-502-xxx) not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or pre-requisites.

Please note that the ability to repeat courses is dependent upon availability of courses. Students may be required to apply for program re-entry in order to repeat courses.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

## **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## **GPS for Student Success**

10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

## **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

#### Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## SAMPLE FULL-TIME CURRICULUM OPTION

Term		10 credits
31502337	Nail Technology	1
30502322	Manicurist Client Service	4
30502323	Manicurist Capstone	2
30502331	Advanced Nail Technology	2
30502332	Nail Salon Operations & Managemen	t 1
	Total	credits 10

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

NOTES:		

## **COURSE DESCRIPTIONS**

## Advanced Nail Technology

30502331.....2 credits

This course will provide students with advanced nail techniques. Fundamentals will include: nail terminology, acrylics, nail enhancements, gel services, nail design, product knowledge, and safety and sanitation procedures. Corequisite: Nail Technology 30502337 or consent of instructor

## **Manicurist Capstone**

30502323 .....2 credits

Students prepare for the state board exam and for securing a job. Students complete a mock assessment of all state board practical and written concepts, including state law. Students also prepare for their job search and for working with the business side of the nail industry. Course includes student completion of the Barbicide® Certification and Barbicide® COVID-19 Certification.

Corequisite: Manicurist Client Service 30502322

## Manicurist Client Service

30502322 ...... 4 credits

Perform spa nail services on guests including manicures, pedicures, nail enhancement services, and specialty techniques. Apply critical client interaction and professionalism to all aspects of guest services. Improve time and accuracy of services throughout the course. Includes refining techniques that will ensure entry-level preparedness for the Wisconsin licensure exam. Students complete this course in the on-campus salon. Corequisite: Nail Salon Operations & Management 30502332

# Nail Salon Operations & Management 30502332 .....1 credit

This course includes business and management principles for nail technicians, laws and regulations, and career strategies. Emphasized are daily operations of a salon, client consultations and relations, infection control, proper business practices, and professional attitudes. Additionally, is a focus on industry trends, salon sales, and advertising techniques.

Corequisite: Advanced Nail Technology 30502331

## Nail Technology

31502337.....1 credit

Students achieve skills in manicuring, pedicuring, and nail enhancement services, including polish application and massage techniques. Students study nail shape and safe and sanitary use of nail care products. Paraffin hand dips, advanced polish techniques, and various nail art application are practiced.

Prerequisite: Admission to Cosmetology program 315021 or Nail Technician program 305024



## **NURSING**

# Associate in Applied Science (AAS) Program Code: 10-543-1 Total Credits: 66\*†

The Associate Degree Nursing (ADN) program at Mid-State prepares each graduate to work successfully as a registered nurse (RN). Students acquire a balance of knowledge and technical skills in physical and biological sciences, social sciences, and nursing. They also contribute to classroom discussion, independent learning projects, simulation labs, and hands-on clinical experiences at area healthcare agencies. After completing all required first- and second-semester nursing courses, students can opt to take the national licensing exam for practical nurse (NCLEX-PN). After completing the entire nursing program, the graduate will be eligible to take the national licensing exam for registered nurse (NCLEX-RN).

Mid-State's Nursing program prepares students to obtain the required licensure to be employed/practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examination, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

## **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

## **CHECKLIST:**

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Criminal Background Statement of Understanding and Release of Information Form
- □ Technical Standards Form
- ☐ Health Work Requirement Discussion
- Other:

\*The 1- credit GPS for Student Success course is a College requirement for graduation, not a Nursing program requirement. This course may be waived for students who are enrolled in a technical diploma program less than 6 credits that is not embedded within an Associate degree program or a program that entails 6 credits or less; have obtained 60 credits with a minimum GPA of 2.0; have obtained an Associate degree or a Baccalaureate degree; or are enrolled in a shared program.

<sup>†</sup>The Nursing Assistant course is required for admission to the Nursing associate degree program and is not counted in the total credit value for this program. All students enrolled in the nursing bridge pathways are required to take this course.

mstc.edu 888.575.6782 TTY: 711





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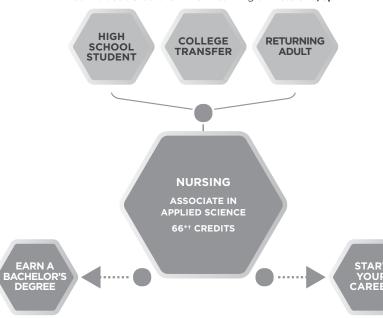
Wisconsin Rapids, WI 54494

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Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Central Service Technician
- Health & Wellness Promotion
- Health Information Management
- Medical Assistant
- · Medical Coder
- Nursing Assistant
- Pharmacy Services Management
- · Pharmacy Technician
- Phlebotomy Technician
- Respiratory Therapy
- Surgical Technologist

## **CAREER OPTIONS**

- Staff Nurse
- Clinic Nurse
- · Charge Nurse

## **BACHELOR'S DEGREE OPTIONS**

Alverno College, Bryant & Stratton College, Cardinal Stritch University, Carthage College, Chamberlain College of Nursing, Chamberlain University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Marian University, Mount Mary University (MMU), Purdue University Northwest, UW-Eau Claire, UW-Green Bay, UW-Madison, UW-Milwaukee, UW-Stevens Point, Viterbo, and Western Governor's University.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Nursing graduate, to be able to:

- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving professional identity as a nurse committed to evidence-based practice, caring, advocacy, and quality care.
- Demonstrate appropriate written, verbal, and nonverbal communication in a variety of clinical contexts.
- Integrate social, mathematical, and physical sciences as well as pharmacology and pathophysiology in clinical decision making.
- Provide patient-centered care by utilizing the nursing process across diverse populations and health care settings.
- Minimize risk of harm to patients, members of the health care team, and self through safe individual performance and participation in system effectiveness.
- Lead the multidisciplinary health care team to provide effective patient care throughout the lifespan.
- Use information and technology to communicate, manage data, mitigate error, and support decision making.

## **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Nursing students will take the NCLEX-RN exam, and the results from this exam will satisfy the TSA requirement.

The Nursing program is approved by the Wisconsin Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN). ACEN can be reached for program verification information at:

Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326 www.acenursing.org • Phone: 404.975.5000

## **TO APPLY**

To apply to the Nursing program, please submit the following to Mid-State Admissions:

#### Step 1

- Complete a Mid-State Application form and return it with a \$30 non-refundable application fee.
- Submit the Criminal Background Statement of Understanding and Release of Information form. This form is available at mstc.edu/programs/nursing.

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

3. Submit Technical Standards form. This form is available at mstc.edu/programs/nursing.

## Step 2 (required prior to starting core nursing classes):

1. Complete the Accuplacer or ACT test (if needed, as determined by academic advisor).

- 2. Complete the Nursing Assistant pre-requisite requirement.
- 3. Required completion of the following courses with a grade of "C" or better:
  - General Anatomy & Physiology
  - Advanced Anatomy & Physiology
  - Developmental Psychology
  - English Composition 1
- 4. Recommended completion of the following courses with a grade of "C" or better:
  - Intro to Psychology
  - Intro to Sociology or Introduction to Diversity Studies
  - Microbiology
  - Oral/Interpersonal Communication or Speech

## **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a nurse is available at **mstc.edu/programs/nursing**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

## **CLINICAL-RELATED REQUIREMENTS**

Students are required to purchase an account with a third-party vendor who manages documents relating to criminal background check, CPR, and health work. The student is responsible for all fees associated with these requirements. All requirements must be completed to be eligible for clinical placement.

Clinical sites have the right to refuse a student (initial or continued) placement. Reasons for refusal may include (but are not limited to) incomplete agency-required orientation/computer-based training, incomplete health work requirements, results of the background check, pending charges, or conviction records. If the clinical site will not allow the student to participate in clinical at that site, this may mean the student will not be able to progress in the program, and will therefore not be able to complete the courses required for graduation.

Prior to beginning a clinical experience in a health care facility, students must:

- a) Submit evidence of completed health work.
- b) Provide evidence of current American Heart Association or American Red Cross BLS CPR Certification.
- c) Complete all agency-required orientation and computer-based training.
- d) Accept responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.
- e) Obtain the required uniform for clinical experiences.

## PROGRAM PROGRESSION AND COMPLETION

In order to progress in and successfully complete the program, students must:

- Maintain a program GPA of 2.0 or higher.
- Receive a grade of "C" or better in all courses required for graduation. Grades earned in core nursing courses are not rounded and will reflect the student's actual grade.

 If a student is not successful in a Nursing 10543 core course, he/she will need to repeat that course prior to progressing in the program. Potential continuation is dependent upon availability in the course/program.

A student may repeat the same course only once in the ADN program. If the course is failed a second time, the student will be withdrawn from the Nursing program. If an ADN student fails four separate nursing courses, the student will be withdrawn from the program. Failures will include failing the same course or failing different courses. A withdrawal grade of "W" counts as one attempt for the course.

## **ARTICULATION OPPORTUNITIES**

Articulation opportunities are between Wisconsin technical colleges with the implementation of the system-wide nursing curriculum. Identical courses in nursing throughout the Wisconsin Technical College System (WTCS) make transfer and readmission to other WTCS colleges easier for nursing students throughout the state. This articulation is based on seat availability and college residency requirements.

Also, articulation opportunities in nursing are available with most private universities and all public universities in Wisconsin. Generally, a graduate of Mid-State's Nursing program can expect approximately 60–70 credits to transfer from Mid-State to a Wisconsin university.

# ELIGIBILITY REQUIREMENTS FOR REGISTERED NURSE EXAMINATION

- Graduated from high school or its equivalent as determined by the Wisconsin State Board of Nursing.
- 2. Wisconsin State Statutes require that the student DOES NOT have an arrest or conviction record for acts or circumstances that relate directly to the clinical practice of the license being requested (e.g., harm/injury; drug or alcohol impairment). Individuals cannot be discriminated against for arrest or conviction records if the precipitating actions do not directly relate to practice.
- Graduated from a Wisconsin Board of Nursing approved program.

#### MAINTAINING A NURSING LICENSE

The Wisconsin State Board of Nursing may revoke, limit, suspend, or deny renewal of license if the person has committed any of the following:

- 1. Fraud in the procuring or renewal of the license.
- 2. One or more violations of the Nurse Practice Act (Chapter 441) or accompanying Administrative Rules.
- 3. Acts that show practitioner to be unfit or incompetent.
- 4. Misconduct or unprofessional conduct.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT\***

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success & 10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course is recommended to be completed prior to obtaining 12 credits and is a graduation requirement unless you receive an exemption from your program advisor.

## ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing 10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## **SAMPLE CURRICULUM OPTION**

Prerequisites/Required Prior to Beginning Nursing Courses					
10806177 10806179 10809188 10801136 30543300	General Anatomy & Physiology  Advanced Anatomy & Physiology Developmental Psychology  English Composition 1  Nursing Assistant <sup>†</sup>	4 4 3 3 3			
	Prior to Graduation or Recommended Pr	ior			
10801196 10801198 10809172 10809196	Oral/Interpersonal Communication & -or- Speech & Introduction to Diversity Studies & -or- Intro to Sociology &	3			
10806197 10809198 10890102	Microbiology & Intro to Sociology & Intro to Psychology & GPS for Student Success*	4 3 1			
Nursing C	Courses				
Term 1 10543101 10543102 10543103 10543104	Nursing Fundamentals Nursing Skills & Nursing Pharmacology & Nursing Introduction to Clinical Practice &	2 3 2 2			
<b>Term 2</b> 10543105 10543106 10543107 10543108	Nursing Health Alterations Nursing Health Promotion Nursing: Clinical Care Across the Lifespan Nursing Introduction to Clinical Care Management	3 3 2			
<b>Term 3</b> 10543109 10543110 10543111 10543112	Nursing: Complex Health Alterations 1 Nursing: Mental Health and Community Concepts Nursing: Intermediate Clinical Practice Nursing Advanced Skills	3 2 3 1			
<b>Term 4</b> 10543113 10543114	Nursing: Complex Health Alterations 2 Nursing: Management and Professional Concepts	3			
10543115 10543116	Nursing: Advanced Clinical Practice Nursing: Clinical Transition	3 2			

NOTES:		

\*The 1- credit GPS for Student Success course is a College requirement for graduation, not a Nursing program requirement. This course may be waived for students who are enrolled in a technical diploma program less than 6 credits that is not embedded within an Associate degree program or a program that entails 6 credits or less; have obtained 60 credits with a minimum GPA of 2.0; have obtained an Associate degree or a Baccalaureate degree; or are enrolled in a shared program.

<sup>†</sup>The Nursing Assistant course is required for admission to the Nursing associate degree program and is not counted in the total credit value for this program.

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

Total credits 66\*\*

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

## **Nursing Fundamentals**

10543101 .....2 credits

Focuses on basic nursing concepts to provide evidenced-based care to diverse patient populations across the lifespan. Current and historical issues impacting nursing are explored within the scope of nursing practice. Introduces the nursing process as a framework for organizing the care of patients.

Prerequisite: Successful completion of all Step 2 Nursing program required courses and space availability; Nursing Assistant 30543300

## Nursing Skills 🗹

10543102.....3 credits

Focuses on development of evidence-based clinical skills and physical assessment across the lifespan. Includes mathematical calculations and conversions related to clinical skills. Teaches techniques related to obtaining a health history and basic physical assessment skills using a body systems approach.

Prerequisite: Successful completion of all Step 2 Nursing program required courses and space availability; Nursing Assistant 30543300

## Nursing Pharmacology **☑**

10543103.....2 credits

Introduces the principles of pharmacology, including drug classifications and their effects on the body. Emphasizes the use of the components of the nursing process when administering medications.

Prerequisite: Successful completion of all Step 2 Nursing program required courses and space availability.

# Nursing Introduction to Clinical Practice ☑ 10543104 ......2 credits

This introductory clinical course emphasizes basic nursing skills and application of the nursing process in meeting the needs of diverse clients across the lifespan. Emphasis is placed on performing basic nursing skills, the formation of nurse-client relationships, communication, data collection, documentation, and medication administration.

Prerequisite: Successful completion of all Step 2 Nursing program required courses and space availability; Corequisites: Nursing Fundamentals 10543101, Nursing Skills 10543102, and Nursing Pharmacology 10543103

## Nursing Health Alterations

10543105 ......3 credits

Elaborates on the basic concepts of health and illness as presented in Nursing Fundamentals. Applies theories of nursing in the care of patients through the lifespan, using problem solving and critical thinking. Provides an opportunity to study conditions affecting different body systems and apply evidence-based nursing interventions. Also introduces concepts of leadership and management. *Prerequisites: Nursing Fundamentals 10543101, Nursing Skills 10543102, Nursing Pharmacology 10543103, and Intro to Clinical 10543104* 

## **Nursing Health Promotion**

10543106 .....3 credits

Focuses on topics related to health promotion for individuals and families throughout the lifespan. Covers nursing care of the developing family, including reproductive issues, pregnancy, labor and delivery, post-partum, the newborn, and the child. Recognizing the spectrum of healthy families, students discern patterns associated with adaptive and maladaptive behaviors applying mental health principles. Emphasizes teaching and supporting healthy lifestyle choices for individuals of all ages. Nutrition, exercise, stress management, empowerment, and risk reduction practices are highlighted. Study of the family covers dynamics, functions, discipline styles, and stages of development.

Prerequisites: Nursing Fundamentals 10543101, Nursing Skills 10543102, Nursing Pharmacology 10543103, and Intro to Clinical Practice 10543104

# Nursing: Clinical Care Across the Lifespan 10543107......2 credits

Applies nursing concepts and therapeutic interventions to clients across the lifespan. Provides an introduction to concepts of teaching and learning, and emphasizes extending care to include the family.

Prerequisites: Nursing Fundamentals 10543101, Nursing Skills 10543102, Nursing Pharmacology 10543103, and Intro to Clinical Practice 10543104; Corequisite: Nursing Health Promotion 10543106

# Nursing Introduction to Clinical Care Management 10543108 ......2 credits

Applies nursing concepts and therapeutic nursing interventions to groups of clients across the lifespan. Provides an introduction to leadership, management, and team building.

Prerequisites: Nursing Fundamentals 10543101, Nursing Skills 10543102, Nursing Pharmacology 10543103, and Intro to Clinical Practice 10543104; Corequisite: Nursing Health Alterations 10543105

## Nursing: Complex Health Alterations 1 10543109 ......3 credits

Prepares the student to provide and evaluate care for patients across the lifespan with alterations in cardiovascular, respiratory, endocrine, and hematologic systems. Also focuses on patients with fluid/electrolyte and acid-base imbalance as well as alterations in comfort. Prerequisites: Health Alterations 10543105, Nursing Health Promotion 10543106, Clinical Care Across the Lifespan 10543107, and Intro to Clinical Care Management 10543108

# Nursing: Mental Health and Community Concepts 10543110 ......2 credits

Covers topics related to the delivery of community and mental health care. Specific health needs of individuals, families, and groups are addressed across the lifespan. Attention is given to diverse and at-risk populations. Mental health concepts concentrate on adaptive/maladaptive behaviors and specific mental health disorders. Community resources are examined in relation to specific types of support offered to racial, ethnic, economically diverse individuals and groups.

Prerequisites: Health Alterations 10543105, Nursing Health Promotion 10543106, Clinical Care Across the Lifespan 10543107, and Intro to Clinical Care Management 10543108

# Nursing: Intermediate Clinical Practice 10543111 ......3 credits

This intermediate-level clinical course develops the RN role when working with clients with complex health care needs. Includes developing skills needed for managing multiple clients and priorities. Using the nursing process, students gain experience in adapting nursing practice to meet the needs of clients with diverse needs and backgrounds. Prerequisites: Health Alterations 10543105, Nursing Health Promotion 10543106, Clinical Care Across the Lifespan 10543107, and Intro to Clinical Care Management 10543108; Corequisites: Complex Health Alterations 10543109, Mental Health and Community Concepts 10543110, and Advanced Skills 10543112

# Nursing Advanced Skills 10543112.....1 credit

Focuses on the development of advanced clinical skills across the lifespan. Includes advanced intravenous skills, blood product administration, chest tube systems, basic electrocardiogram interpretation, and nasogastric/feeding tube insertion.

Prerequisites: Health Alterations 10543105, Nursing Health Promotion 10543106, Clinical Care Across the Lifespan 10543107, and Intro to Clinical Care Management 10543108; Corequisites: Nursing: Complex Health Alterations 10543109, Nursing: Mental Health and Community Concepts 10543110

# Nursing: Complex Health Alterations 2 10543113.....3 credits

Prepares students to provide and evaluate care for patients across the lifespan with alterations in the immune, neuro-sensory, musculoskeletal, gastrointestinal, hepatobiliary, renal/urinary, reproductive systems and shock, burns, and trauma. Includes a focus on managing care for patients with high-risk perinatal conditions and high-risk newborns.

Prerequisites: Complex Health Alterations 1 10543109, Mental Health & Community Concepts 10543110, Intermediate Clinical Practice 10543111, and Advanced Skills 10543112

# Nursing: Management and Professional Concepts 10543114 ......2 credits

Covers nursing management and professional issues related to the role of the registered nurse. Emphasizes preparing for practice as a registered nurse.

Prerequisites: Complex Health Alterations 1 10543109, Mental Health & Community Concepts 10543110, Intermediate Clinical Practice 10543111, and Advanced Skills 10543112

# Nursing: Advanced Clinical Practice 10543115......3 credits

This advanced clinical course requires the student to integrate concepts from all previous courses in the management of groups of clients facing complex health alterations. Students have the opportunity to further develop critical thinking skills using the nursing process in making clinical decisions. Emphasizes continuity of care through interdisciplinary collaboration.

Prerequisites: Complex Health Alterations 1 10543109, Mental Health & Community Concepts 10543110, Intermediate Clinical Practice 10543111, and Nursing Advanced Skills 10543112; Corequisites: Nursing: Complex Health Alterations 2 10543113 and Nursing: Management and Professional Concepts 10543114

## **Nursing: Clinical Transition**

10543116 .....2 credits

This clinical experience integrates all knowledge learned in the previous courses in transitioning to the role of the graduate nurse. Promotes relatively independent clinical decisions, delegation, and working collaboratively with others to achieve client and organizational outcomes. Fosters continued professional development. Corequisite: Advanced Clinical Practice 10543115

## Nursing Assistant<sup>†</sup> 30543300.....3 credits

The Nursing Assistant program prepares students for employment as nursing assistants. The program also prepares Nursing Assistant students with some of the skills needed for the first semester of the Nursing program. During this 120-hour course, students are required to demonstrate the following skills under the supervision of a licensed nurse: communication, basic nursing assistant and personal care skills, attention to clients' rights, and care of clients with dementias. The program is recognized by the Wisconsin Department of Health Services as a nurse-aide training program. Upon successful completion of the program, students are eligible to take the Wisconsin Nursing Assistant competency evaluation for employment in nursing homes, hospitals, home health agencies, hospices, CBRFs, assisted living centers, and homes for the developmentally disabled. Prerequisite: Admission to Nursing Assistant program 305431 and Nursing Assistant Checklist within last 3 months

# English Composition 1 2 10801136 ......3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

# Oral/Interpersonal Communication © 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Speech 🗹

## 10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# General Anatomy & Physiology © 10806177......4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236 or ACT of 15, or General Chemistry 10806134 with a grade of "C" or better or General Riplogy 10806114 with a grade of "C" or better

or heading skins of accupiates. The area of "C" or heading skins of "C" or better, or General Biology 10806114 with a grade of "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Advanced Anatomy & Physiology 10806179...... 4 credits

The second semester in a two-semester sequence in which normal human anatomy and physiology are studied using a body system approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instructional delivery is within a classroom and laboratory setting. Experimentation within a science lab includes analysis of cellular metabolism and the individual components of body systems such as the nervous, neuromuscular, cardiovascular, and urinary. Continued examination of homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance, and blood. Integration of genetics to human reproduction and development are also included in this course. *Prerequisite: General Anatomy & Physiology 10806177 with a grade of "C" or better* 

## Microbiology ☑

## 10806197...... 4 credits

Examines microbial structure, metabolism, genetics, growth, and the relationship between humans and microorganisms. Disease production, epidemiology, host defense mechanisms, and the medical impact of microbes in the environment, industry, and biotechnology are also addressed. Prerequisite: General Anatomy & Physiology 10806177 with a "C" or better, or General Biology 10806114 with a "C" or better, or Plant Biology 10806184 with a grade of "C" or better

# Introduction to Diversity Studies 10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not

# Developmental Psychology & 10809188......3 credits

meet these requirements.

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others.

critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Intro to Sociology & 10809196 ......3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography.

religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Psychology &

10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.



# NURSING ASSISTANT

**Technical Diploma** 

Program Code: 30-543-1

**Total Credits: 3** 

The Nursing Assistant program at Mid-State provides hands-on learning that prepares students to assist in the care of patients in hospitals, extended care facilities, and home care situations. This 120-hour program includes online learning, campus lab experiences, and a 40-hour clinical practicum working with patients and residents. Skills labs ensure students have opportunities to practice skills under the supervision of experienced professionals. Personal care and emotional support of patients are always primary considerations. Upon completion of the course, students may choose to take the state certification exam.

Mid-State's Nursing Assistant program course prepares students to obtain state certification to be employed/practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examinations, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

## **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

#### **CHECKLIST:**

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- ☐ Background Information Disclosure (BID) Form
- ☐ \$15 or Current Criminal Background Check
- Out-of-State Background Check (if you have lived outside of the State of Wisconsin in the last three years)
- ☐ Nursing Assistant Online Orientation & Quiz (good for 90 days)
- ☐ Technical Standards Form
- □ Other:\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS

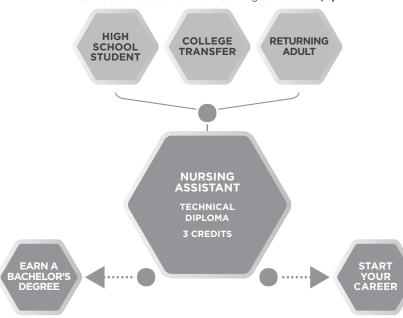
500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **OTHER OPTIONS**

## **RELATED PROGRAMS**

- Central Service Technician
- Health & Wellness Promotion
- Health Information Management
- Medical Assistant
- Medical Coder
- Nursing
- Pharmacy Services Management
- Pharmacy Technician
- Phlebotomy Technician
- Respiratory Therapy
- Surgical Technologist

## **CAREER OPTIONS**

- CBRF Caregiver
- Home Health Aide
- Nursing Assistant

## **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Nursing Assistant graduate, to be able to:

- Communicate and interact effectively with clients, families, and co-workers.
- · Maintain and protect client rights.
- Report information and record observations.
- Demonstrate the ethical and legal responsibilities of the NA/HHA.
- Provide safe care to a diverse population, meeting personal, physical, and psychosocial client needs.
- Assist with client rehabilitation and restorative care, promoting independence.
- Assist clients with long-term, disabling conditions including dementia, always focusing on the strengths of the client.
- Work cooperatively in a team environment.
- Be eligible to take the WI NA Competency evaluation.

**Note:** Outcomes for the Nursing Assistant program are state and federally mandated.

## **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Nursing Assistant students will fulfill the TSA requirement with successful completion of the Nursing Assistant course.

The Mid-State Technical College Nursing Assistant program is accredited by the Wisconsin Department of Health Services (DHS) Bureau of Quality Assurance.

## **ADDITIONAL ENTRY CRITERIA**

To apply to the Nursing Assistant program, please submit the following documents to Mid-State Admissions:

GPA of 2.6 as a high school junior or above.

Complete a Background Information Disclosure (BID) form and submit \$15 Caregiver Background check. The Wisconsin Caregiver Law requires a background check.

Must be at least 16 years of age.

After satisfactorily completing above steps, complete an online information session and accompanying quiz found on the Nursing Assistant accepted student website. In the information session, students learn about the profession, academic requirements of the program, and the impact of program coursework on one's personal life. Once a student has completed the steps above, he/she is then able to register for the Nursing Assistant course.

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

Upon completion of the nursing assistant course, students must pass a state certification exam to become a certified nursing assistant (CNA). Appropriate proof of identity will be required by the certification testing agency.

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a nursing assistant is available at **mstc.edu/programs/nursing-assistant**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

## **CLINICAL-RELATED REQUIREMENTS**

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the course and will not be able to advance in the program.

Prior to beginning a clinical experience in a health care facility, students must:

- a. Submit evidence of completed health work.
- b. Obtain the required uniform for clinical experiences.
- Accept responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.

## PROGRAM PROGRESSION

In order to successfully complete the program, students must receive a "C" or better in the Nursing Assistant course 30543300.

#### **CERTIFICATION**

The Department of Health Services Bureau of Quality Assurance requires that students who successfully pass the Nursing Assistant program take a state certification exam to qualify them to be listed in the state and federal nurse aide registries. Information to apply for this certification exam will be provided to students during their Nursing Assistant course. Nursing assistants must be listed on the state and federal nurse aide registries to be eligible to work in Wisconsin. Appropriate proof of identity will be required by the certification testing agency.

#### ADDITIONAL OPTIONS

- The Nursing Assistant-Acute Care course (10543173)
   expands the skill set of the nursing assistant. Prerequisite:
   completion of a 120-hour state approved nurse aide
   training program or current certification on the Wisconsin
   Nurse Aide registry. This course is a requirement for the
   Associate Degree Nursing program.
- Nursing Assistant program is a prerequisite for admission to the Nursing program.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

## SAMPLE FULL-TIME CURRICULUM OPTION

**Term** 

(3 credits)

30543300 Nursing Assistant

(5 Cleares

**Total credits 3** 

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

## **COURSE DESCRIPTIONS**

## **Nursing Assistant**

30543300.....3 credits

The Nursing Assistant program prepares students for employment as nursing assistants. The program also prepares Nursing Assistant students with some of the skills needed for the first semester of the Nursing program. During this 120-hour course, students are required to demonstrate the following skills under the supervision of a licensed nurse: communication, basic nursing assistant and personal care skills, attention to clients' rights, and care of clients with dementias. The program is recognized by the Wisconsin Department of Health Services as a nurse-aide training program. Upon successful completion of the program, students are eligible to take the Wisconsin Nursing Assistant competency evaluation for employment in nursing homes, hospitals, home health agencies, hospices, CBRFs, assisted living centers, and homes for the developmentally disabled. Prerequisite: Admission to Nursing Assistant program 305431 and Nursing Assistant Checklist within last 3 months



# OFFICE SUPPORT SPECIALIST

**Technical Diploma** 

Program Code: 31-106-8

**Total Credits: 32** 

Mid-State's Office Support Specialist program develops students into key members of an office team. The program emphasizes document preparation and the effective use of personal interactions and ever-changing technology to support your role as the central communications link in an office. Through a variety of activities, you will learn to handle multiple projects and deadlines, manage time, solve problems, and be helpful in nature—all skills in high demand by employers.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- ☐ Other:\_\_\_\_\_

\_\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





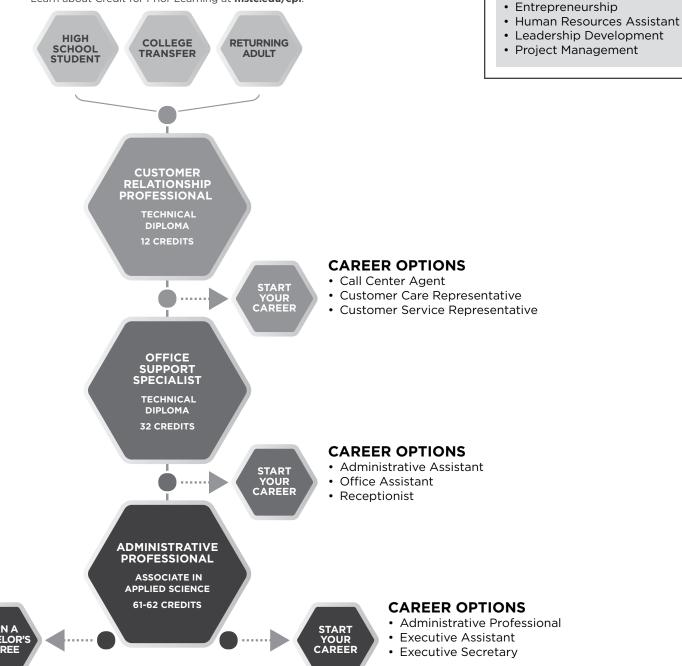
**ADAMS CAMPUS** 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

500 32nd Street North Wisconsin Rapids, WI 54494

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

OTHER OPTIONS

**RELATED PROGRAMS** 

• Business Management

#### **PROGRAM OUTCOMES**

Employers will expect you, as an Office Support Specialist graduate, to be able to:

- Perform accurate workplace communications.
- Use technology skills for business tasks.
- Perform routine office procedures.
- Demonstrate professionalism and effective workplace relationships.

## **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Office Support Specialist program outcomes are measured in the TSA-designated course Administrative Office Procedures.

#### PROGRAM PROGRESSION

In order to maintain a passing status and progress in the program, students must:

 Receive a grade of "C" or better in Administrative Office Procedures.

## MOBILE DEVICE ENHANCEMENT

To support your hands-on learning and give you an edge in today's digital workplace, Office Support Specialist program students are required to purchase an iPad device. Students accepted into the program will receive specific details about purchasing the mobile device (financial aid available).

## STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success ☑ 10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10103106 10106106 10106157 10801136 10809172	Microsoft Office-Introduction* & Quality Customer Service* Document Formatting & English Composition 1* & Introduction to Diversity Studies* &	15 credits 3 3 3 3 3 3
Term 10103114 10103125 10106140 10106150 10106158 10106172 10801196	Word-Intermediate*  Excel Applications* Business Information Management Administrative Office Procedures Proofreading & Editing  Digital Communication Technology Oral/Interpersonal Communication*	17 credits  1 2 3 3 2 3 2 3 credits 32

- \* This course may also be offered in a different term including during winterim or summer terms, with 3-week, 8-week, or 16-week sessions available. A variety of modalities and class lengths may be available, including online, hybrid, TelePresence, or face to face.
- This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This program can be completed entirely online.
- Students complete a full-time course load over a 16-week term.
   This term may include a combination of classes taken in an 8-week session and classes taken over the full 16-week term.
- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10103106 10106157 10809172	Microsoft Office-Introduction* & Document Formatting & Introduction to Diversity Studies* &	9 credits 3 3 3
<b>Term</b> 10106106 10106158 10801136	Quality Customer Service* Proofreading & Editing & English Composition 1* &	8 credits 3 2 3
<b>Term</b> 10103114 10103125 10801196	Word-Intermediate*  Excel Applications* Oral/Interpersonal Communication*	6 credits 1 2 3
<b>Term</b> 10106140 10106150 10106172	Business Information Management Administrative Office Procedures Digital Communication Technology	<b>9 credits</b> 3 3 3
	Total	credits 32

NOTES:				

## **Administrative Office Procedures**

10106150 .....3 credits

Develops professional skills and attitudes needed in a global business environment. Skills include time management, problem solving, and decision making while working independently and as part of a team. Tasks such as electronic mail, calendaring, meeting and event planning, domestic and international travel, and minute-taking are included. Corequisites: English Composition 1 10801136 and Microsoft Office-Introduction 10103106

## **Business Information Management**

10106140.....3 credits

Following commonly-used ARMA rules, the student applies basic filing methods to paper and database filing systems. Corequisite: Microsoft Office-Introduction 10103106

## **Digital Communication Technology**

10106172 .....3 credits

Introduces the student to digital and communication technology used in the office today, including digital cameras, digital video cameras, video conferencing, and multimedia presentations. The content focuses on understanding communication technologies and how they impact employees.

Corequisite: Microsoft Office-Introduction 10103106

## **Document Formatting**

10106157 ......3 credits

Students are able to format styles of business letters, business and academic reports, memos, tables, business meeting documents, itineraries, legal documents, and business forms. Also includes drill work for improving keying speed and accuracy. Minimum typing speed of 30 wpm required (alphabetic keys only).

Corequisite: Microsoft Office-Introduction 10103106

## English Composition 1 &

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

## **Excel Applications**

10103125.....2 credits

Learners will expand on basic Excel skills including managing multiple workbooks and worksheets using 3D references, links, and hyperlinks. They will also learn to summarize and analyze data using subtotals, PivotTables, PivotCharts, Goal Seek, Solver and Scenario Manager tools. This course teaches students to gather data and turn it into meaningful information used for business decision-making. Prerequisites: Microsoft Office Introduction 10103106 or Excel Beginning 10103123

## Introduction to Diversity Studies &

10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## 

10103106 ......3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

## Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **Proofreading & Editing**

10106158 .....2 credits

Sharpens proofreading and editing skills. Competencies include detecting and editing errors in keying, spelling, capitalization, plurals, possessives, punctuation, numbers, grammar, sentence structure, and formatting. Documents are edited for clarity, conciseness, and completeness. Corequisite: Microsoft Office-Introduction 10103106

## **Quality Customer Service**

10106106.....3 credits

Addresses sensitivity in communicating with customers and co-workers. Includes international communications, teamwork, working relationships, and telephone skills.

## Word-Intermediate 2

10103114 ......1 credit

Students learn to create more complex documents using Microsoft Word as well as customize the Word environment. Students also learn to use mail merge, macros, collaborate with others, and combine information into one file. Prerequisite: Microsoft Office-Introduction 10103106 or Word-Beginning 10103113



# PARAMEDIC TECHNICIAN

# Associate in Applied Science (AAS) Program Code: 10-531-1 Total Credits: 66

Mid-State's Paramedic Technician program prepares students with the knowledge and skills to work competently as an entry-level paramedic. In this associate degree program, students will complete two semesters of general studies as well as two semesters of core paramedic courses in a joint cohort with students in the EMT-Paramedic program. You will learn prehospital skills in the classroom, skills laboratory, hospital, and prehospital settings. Upon successful completion, you will earn certifications in Advanced Cardiac Life Support, Prehospital Trauma Life Support, and Pediatric Advanced Life Support and be eligible to take the National Registry written and practical examinations.

Mid-State's Paramedic Technician program prepares students to obtain the required licensure to be employed/practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examination, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

## **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

#### **CHECKLIST:**

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Criminal Background Statement of Understanding and Release of Information Form

Ш	Other:			

mstc.edu 888.575.6782 TTY: 711





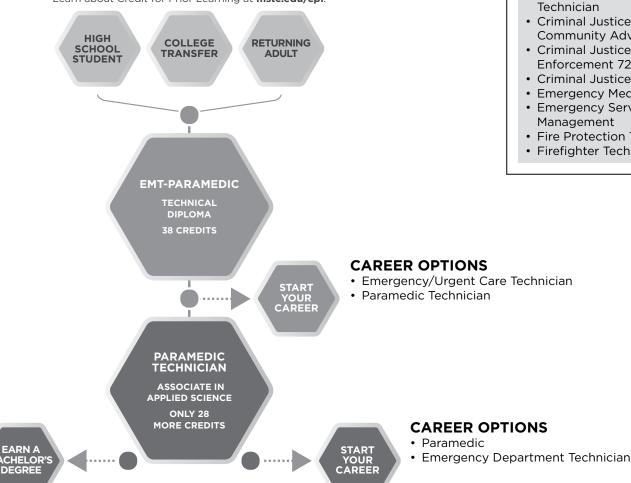
ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

500 32nd Street North Wisconsin Rapids, WI 54494

## **BEGIN AT ANY POINT** IN THE PATHWAY

**College Credit • Dual Credit** Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## OTHER OPTIONS

#### **RELATED PROGRAMS**

- · Advanced Emergency Medical Technician
- Criminal Justice-Corrections & Community Advocacy
- · Criminal Justice-Law Enforcement 720 Academy
- · Criminal Justice-Studies
- Emergency Medical Technician
- Emergency Services Management
- Fire Protection Technician
- Firefighter Technician

**BACHELOR'S DEGREE OPTIONS** 

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Paramedic Technician graduate, to be able to:

- Prepare for incident response and EMS operations.
- Integrate pathophysiological principles and assessment findings to provide appropriate patient care.
- Demonstrate paramedic skills associated with established standards and procedures for a variety of patient encounters
- · Communicate effectively with others.
- · Demonstrate professional behavior.
- Meet state and national competencies listed for paramedic credentialing.

Paramedic Technician is based upon the US Department of Transportation Administration/Wisconsin Bureau Local Health Support and EMS curriculum.

## **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will fulfill the TSA requirements when they complete the clinical and field courses.

## ADDITIONAL ENTRY CRITERIA

To apply to the Paramedic Technician program, please submit the following document to Mid-State Admissions:

#### Step 1

Criminal Background Statement of Understanding and Release of Information form.

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

Completion of step 1 requirements allows the student to begin general education courses.

If you are taking Emergency Medical Technician program courses as part of the Paramedic Technician program, you must apply to Emergency Medical Technician program (30-531-3) separately. Although the Emergency Medical Technician program is part of the curriculum, it is handled as a stand-alone program for admission purposes.

#### Step 2:

Submit a current Wisconsin EMT license.

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

Completion of the Step 2 requirement will make the student eligible for entry into the Paramedic core courses. Completion of Step 2 does not guarantee entry into the next available cohort of core program students. Cohorts are filled on a first-eligible, first-served basis.

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a paramedic technician is available at **mstc.edu/programs/paramedic-technician**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

## **CLINICAL-RELATED REQUIREMENTS**

Prior to placement at a clinical site, students need to pay for a criminal background check through a private vendor. Students will be required to provide documentation of required health work and current healthcare provider CPR certification via a Blackboard assignment. Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the course and will not be able to advance in the program.

Prior to beginning a clinical experience in a healthcare agency or ambulance service, students must:

- a. Provide evidence of completion of the required health work.
- b. Hold a current State of Wisconsin EMT license.
- c. Hold a Department of Health Services EMS Training Center Training Permit at the paramedic level.
- d. Provide evidence of current CPR at the health care professional level by a CPR organization specified under s. DHS 110.17(1).
- e. Obtain the required uniform for clinical experiences.
- f. Assume responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.

#### PROGRAM PROGRESSION

In order to progress in and complete the program, students must receive a grade of "C" or better in each of the paramedic core courses. Failure to obtain a grade of "C" in any core course will prevent a student from progressing on to the next course in the sequence until they have retaken the course and achieved a grade of "C" or better.

All general education courses must be completed with a grade of "C" or better in order to be eligible for graduation.

Having to retake a core course will require removal from the student's cohort, and placement will be made in the next cohort with an available seat.

This requirement also applies to the last class in the sequence, as the grade of "C" or better is required in all core courses in order to retain eligibility to take the National Registry exam.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

## **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success &

10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 .....2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10531940 10801136 10806177 10809122 10809172 10809196 10809198	EMT Foundations English Composition 1 & General Anatomy & Physiology & Intro to American Government & - Introduction to Diversity Studies & Intro to Sociology & Intro to Psychology &			
<b>Term</b> 10531941 10801196 10801197 10801198 10804107 10806134 10806179	EMT Applications Oral/Interpersonal Communication Technical Reporting -or Speech & College Mathematics & General Chemistry & -or- Advanced Anatomy & Physiology	12 credits 2 2 -or- 3 3 4		
<b>Term</b> 10531911 10531912 10531913 10531914 10531915 10531918 10531955 10531959	EMS Fundamental Paramedic Medical Principles Patient Assessment Principles Prehospital Pharmacology Paramedic Respiratory Management Advanced Resuscitation Paramedic Cardiology 1 Paramedic Clinical	19 credits		
Term 10531919 10531920 10531921 10531922 10531923 10531956 10531957 10531958 10531960	Paramedic Medical Emergencies Paramedic Trauma Special Patient Populations EMS Operations Paramedic Capstone Paramedic Cardiology 2 Paramedic Field Experience Paramedic Field Leadership Paramedic Clinical/Field Prep	19 credits		
Total credits 66				

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

## Advanced Anatomy & Physiology 10806179...... 4 credits

The second semester in a two-semester sequence in which normal human anatomy and physiology are studied using a body system approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instructional delivery is within a classroom and laboratory setting. Experimentation within a science lab includes analysis of cellular metabolism and the individual components of body systems such as the nervous, neuromuscular, cardiovascular, and urinary. Continued examination of homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance, and blood. Integration of genetics to human reproduction and development are also included in this course. Prerequisite: General Anatomy & Physiology 10806177 with a grade

## **Advanced Resuscitation**

of "C" or better

10531918.....1 credit

By teaching advanced cardiac life support (ACLS) and pediatric advanced life support (PALS) methodologies and protocols, this course prepares the paramedic student to integrate comprehensive knowledge of causes and pathophysiology into the management of shock, respiratory failure, respiratory arrest, cardiac arrest, and peri-arrest states. Emphasizes early intervention to prevent respiratory and/or cardiac arrest if possible.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## College Mathematics & 10804107 ......3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### **EMS Fundamental**

10531911 .....2 credits

Provides learners with comprehensive knowledge of EMS systems, safety, well-being, legal issues, and ethical issues, with the intended outcome of improving the health of EMS personnel, patients, and the community. Learners obtain fundamental knowledge of public health principles and epidemiology as related to public health emergencies. health promotion, and illness/injury prevention. Introduces learners to comprehensive anatomical and medical terminology with the aim of fostering the development of effective communications with colleagues and other healthcare professionals.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## **EMS Operations**

10531922 ......1 credit

Provides paramedic students with the knowledge of operational roles and responsibilities to ensure patient. public, and EMS personnel safety.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## **EMT Applications**

10531941.....2 credits

Course covers the bulk of the Emergency Medical Technician certification course to include the handling of cervical and spine injuries, burn injuries, heart- and breathing-related problems, shock, and other trauma injuries. Includes several lab days to practice and perfect skills, clinical time, and extensive hands-on activities. Prepares students for national certification testing for EMT. To maintain National Registry certification eligibility this course must be finished the semester following the completion of EMT Foundations. Prerequisite: EMT Foundations 10531940

## **EMT Foundations**

10531940 .....3 credits

Covers the basics of the Emergency Medical Technician certification course to include CPR, airways, anatomy, hazmat response requirements, lifting and moving patients, incident command, and other technical information. It is the first part of a two-course system to prepare students for national certification testing for EMT.

Prerequisite: Admission to Emergency Medical Technician 305313 program

## English Composition 12

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

## General Anatomy & Physiology &

10806177...... 4 credits

Examines concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to inform decision making and professional communication with colleagues and patients.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, or ACT of 15, or General Chemistry 10806134, or General Biology 10806114, or Human Body in Health & Disease 1050910 with a grade of "C" or better.

## General Chemistry 🗷

10806134 ...... 4 credits

Covers the fundamentals of chemistry. Topics include the metric system; problem solving; periodic relationships; chemical reactions, chemical equilibrium; properties of water; acids, bases, and salts; and gas laws. Prerequisite: High School GPA of 3.0 or Accuplacer QAS of 246 or ACT of 19,or College Mathematics 10804107 with a "C" or better,

or Intermediate Algebra with Applications 10804118 with a "C" or better. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to American Government & 10809122.....3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups. political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Psychology 2

10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Sociology 2

10809196 .....3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Introduction to Diversity Studies & 10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## **Paramedic Capstone**

10531923 ......1 credit

Provides students with a final opportunity to incorporate their cognitive knowledge and psychomotor skills through labs and scenario-based practice and evaluations prior to taking the National Registry written and practical examinations. Technical skills attainment (TSA) for each student will be compiled and/or documented within this course as required by the DHS-approved paramedic curriculum.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## Paramedic Cardiology 1 10531955......2 credits

Provides basic knowledge to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment for the patient with cardiovascular disease.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## Paramedic Cardiology 2

## 10531956.....2 credits

Teaches the paramedic student knowledge and skills to integrate assessment findings with principles of cardiovascular anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a variety of cardiovascular complaints.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## **Paramedic Clinical**

## 10531959.....2 credits

Enhances learning through the practice of paramedicine in a healthcare environment. Learners will experience actual patients under the supervision of instructors or approved preceptors. Learners will also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## Paramedic Clinical/Field Prep

10531960 .....1 credit

Enhances learning through the practice of paramedicine in a healthcare or field environment. Learners will experience actual patients under the supervision of instructors or approved preceptors.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## Paramedic Field Experience

## 10531957 .....3 credits

Provides the opportunity to enhance learning through the practice of paramedicine in a field environment and through experiences with actual patients under the supervision of instructors or approved preceptors. Students may also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course. Successful completion of this course requires the student to meet all clinical and field competency requirements at the paramedic level as defined by WI DHS EMS.

Prerequisites: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311 and Advanced Resuscitation 10531918

## Paramedic Field Leadership

## 10531958.....1 credit

Provides the opportunity to act as the field team leader in a field environment and through experiences with actual patients under the supervision of instructors or approved preceptors. Successful completion of this course requires the student to meet all team leader competency requirements at the paramedic level as defined by WI DHS EMS and the CoAEMSP.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## **Paramedic Medical Emergencies**

10531919...... 4 credits

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a medical complaint.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## Paramedic Medical Principles

10531912...... 4 credits

Addresses the complex depth of anatomy, physiology, and pathophysiology of major human systems while also introducing paramedic students to the topics of shock, immunology, and bleeding.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

## **Paramedic Respiratory Management**

10531915.....2 credits

Teaches the paramedic student to integrate complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patient airway, adequate mechanical ventilation, and respiration for patients of all ages. Also provides specific knowledge pertaining to the respiratory system to ensure the student is prepared to formulate a field impression and implement a comprehensive treatment plan for a patient with a respiratory complaint.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

#### **Paramedic Trauma**

10531920.....3 credits

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for an acutely injured patient.

Prerequisites: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311 and Advanced Resuscitation 10531918

## **Patient Assessment Principles**

10531913.....3 credits

Teaches the paramedic student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. Uses a structured and organized assessment process that draws on knowledge of anatomy, physiology, pathophysiology, life span development, and changes that occur to the human body with time. Using this process students learn to develop a list of differential diagnoses through clinical reasoning and modify the assessment as necessary to formulate a treatment plan for their patients. Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

### **Prehospital Pharmacology**

### 10531914 .....3 credits

Provides the paramedic student with the comprehensive knowledge of pharmacology required to formulate and administer a pharmacological treatment plan intended to mitigate emergencies and improve the overall health of the patient.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

### **Special Patient Populations**

### 10531921.....3 credits

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for patients with special needs. Also includes gynecological emergencies, along with special considerations in trauma. Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

### Speech 🗷

### 10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Technical Reporting

### 10801197 ......3 credits

The student prepares and presents oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course

Prerequisite: English Composition 1 10801136 with a grade of "C" or better or Written Communication 10801195 with a grade of "C" or better. Proficiency in wordprocessing skills recommended



# PHARMACY SERVICES MANAGEMENT

# Associate in Applied Science (AAS) Program Code: 10-536-1 Total Credits: 60

Graduates of Mid-State's Pharmacy Services Management program are prepared to advance their roles as pharmacy technicians or transition into other roles related to the pharmacy. Their skills and knowledge include third-party payment processing, staff scheduling processes, customer service, and enhancing store sales. In this program, you'll be introduced to business operations and apply what you've learned through a capstone course. This provides hands-on experience with increasing store sales, creating efficient operations, improving management practices, or enhancing service to patients in a real-life situation. Core program courses are offered via video conference hosted by Lakeshore Technical College (LTC) and are supported by select classes available with Mid-State.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_\_\_

- Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- □ Other:\_\_\_\_

mstc.edu 888.575.6782 TTY: 711

**ADAMS CAMPUS** 

401 North Main

Adams, WI 53910



MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive

1001 Centerpoint Drive Stevens Point, WI 54481



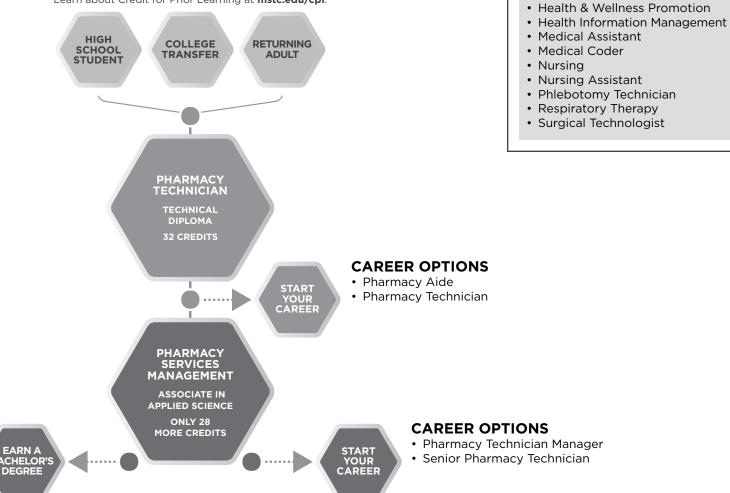
WISCONSIN RAPIDS CAMPUS 500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

**OTHER OPTIONS** 

**RELATED PROGRAMS** 

• Central Service Technician

### **PROGRAM OUTCOMES**

Employers will expect you, as a Pharmacy Services Management graduate, to be able to:

- · Perform all pharmacy technician functions.
- Incorporate into practice professional ethics, laws, regulations, and policies established by the licensing state and regulatory agencies (Pharmacy Examining Board, FDA, DEA).
- Pursue lifelong professional growth and development through self-directed learning, participation in professional organizations, and continuing education.
- Maintain an awareness of developments in the pharmacy and management fields as they relate to job responsibilities.
- Manage human resources and employee development.
- · Resolve conflict and build teams.
- · Implement a mission and goals.
- Demonstrate critical-thinking and problem-solving skills.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Advanced Pharmacy Services Applications course.

### **ADMISSIONS PROCEDURES**

To apply to the Pharmacy Services Management program, please submit the following documents to Lakeshore Technical College (LTC):

- 1. Complete a WTCS application form and return it with the \$30 non-refundable application fee. Check is payable to LTC.
- 2. Complete the Accuplacer or ACT test. Minimum scores required:
  - Arithmetic Accuplacer score of 50
  - ACT equivalents are acceptable

You may take the Accuplacer again if you did not meet the required scores. Additional options, including coursework and tutoring, are also available to assist you. To learn about your options or schedule an Accuplacer test, contact the Student Services & Information Center on your Mid-State campus.

- 3. Submit an official copy of all academic transcripts, including high school, college or university, and HSED/GED.
- 4. Complete a Background Information Disclosure (BID) form and submit \$16 for Caregiver Background check. The Wisconsin Caregiver Law requires a background check.
- 5. Complete health form and immunization records.
- 6. Read, sign, and return the Technical Standards Statement of Understanding form.
- 7. Read, sign, and return the sign-off sheet for the Pharmacy Technician Program Handbook.

- Complete a telephone program advising session with LTC counselor.
- Upon receipt of the above materials, you will be accepted to Lakeshore Technical College. LTC will then notify you of additional program requirements.

Lakeshore Technical College • Admissions 1290 North Avenue, Cleveland, WI 53015-1414

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

### **CREDIT FOR PRIOR LEARNING**

Credit for Prior Learning is available for certain courses in the form of high school advanced standing, transfer credit, test credit, military experience, and experiential credit.

### **CLINICAL-RELATED REQUIREMENTS**

Clinical sites have the right to refuse a student's admission based on conviction records. If you have a criminal history, you may not be able to complete clinical courses. Also, clinical agencies will be notified of all students with pending charges and convictions, and agencies can decline student admission to that agency.

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

NOTES:		

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

### Intro to College Writing

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

10831103 .....3 credits

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### Pre-Algebra

### 10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10501101 10501102 10536110 10536113 10536115 10536120 10536122	Medical Terminology & Health Insurance and Reimbursement* Pharmaceutical Calculations* Pharmacy Business Applications* Pharmacy Law* Fundamentals of Reading Prescriptions* Pharmacology*	3 3 3 3 2 1 3
T	14	
10536125 10536126 10536138 10536141 10536143 10801196	Pharmacy Drug Distribution Systems* Pharmacy Parenteral Admixtures* Pharmacy Community Clinical* Pharmacy Computer Lab* Pharmacy Hospital Clinical* Oral/Interpersonal Communication   **Total Communication**  **Total Commu	2 3 2 2 2 3
<b>Term</b> 10103123 10104102 10182108 10801136 10806112 10809195 10809198	Excel-Beginning &  Marketing Principles & -or- Purchasing*  English Composition 1 &  Principles of Sustainability*  Economics &  Intro to Psychology &	1 3 3 3 3 3 3
Term	12 credi	i+~
10182102 10102101 10196191 10536150 10809166 10809172	Service Operations Management* -or- Introduction to Business  Supervision  Advanced Pharmacy Services Applications* Intro to Ethics: Theory & Application  Introduction to Diversity Studies	3 3 3 3
	Total Credits 6 ses are offered through Lakeshore Technical College on via Telepresence at Mid-State's Stevens Point camp	but
may be take	in via relepresence at mia-state's stevens rount camp	Jus.

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

# Advanced Pharmacy Services Applications 10536150.....3 credits

Allows the learner to integrate skills learned in the Pharmacy Services Management courses and apply them to the pharmacy workplace. Areas include staff training, development, supervision, and scheduling; customer service; PBM processing and claims rejection management; and improving efficiency of operations, maximizing profits, and increasing sales.

Prerequisites: All courses in the Associate Degree plan need to be completed prior to this course.

### Economics &

### 10809195 ......3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### English Composition 1 2

### 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

### Excel-Beginning &

10103123.....1 credit

Students learn to create, modify, and format spreadsheets, charts, and graphics. Students also learn to perform calculations and analysis on data.

# Fundamentals of Reading Prescriptions 10536120.....1 credit

Prepares the learner to work in a community or hospital pharmacy by exploring the role of a pharmacy technician within the healthcare team, examining each step in the prescription filling process, and identifying the key top 200 drugs by brand and generic name and therapeutic class. Condition: 315361 Pharmacy Technician admission requirements met

### Health Insurance and Reimbursement

10501102 .....3 credits

Provides the learner with an understanding of the various types of insurance and managed care plans, and the cycle of medical claims procession. The learner will review cases, develop critical thinking skills in analyzing information, and selecting processes for reimbursement success.

# Intro to Ethics: Theory & Application © 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Intro to Psychology &

10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Introduction to Business 🗹

10102101.....3 credits

An introduction to what a business is, how it operates, and how it is managed. Students will identify forms of ownership and the processes used in production and marketing, finance, personnel and management in business operations.

# Introduction to Diversity Studies & 10809172......3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Marketing Principles 🗷

10104102.....3 credits

This course serves as an introduction to the fundamental marketing concepts used to apply marketing strategies to product development, distribution, pricing, and promotion of goods and services.

### **Medical Terminology** 2

10501101...... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Learners practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

# Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Pharmaceutical Calculations**

10536110 .....3 credits

Prepares the learner to enlarge and reduce formulas and solve proportions, dilutions, allegations, and other calculations pertinent to the preparation of pharmaceuticals using metric, apothecary, avoirdupois, and household measuring systems.

Condition: 315361 Pharmacy Technician, 105361 Pharmacy Services Management, or 195316 Employed Pharmacy Technician admission requirements met

### Pharmacology

10536122 ......3 credits

Enhances the learner's ability to act and react appropriately in the pharmacy by learning how drugs work through examination of the anatomy, physiology, pathophysiology, and drug therapy for each of the major systems.

Condition: 315361 Pharmacy Technician, 105361 Pharmacy Services Management, 615361 Community Retail Pharmacy Technician, or 195361 Employed Pharmacy Technician admissions requirements met

# Pharmacy Business Applications 10536113......3 credits

Prepares the learner to utilize pharmaceutical business terminology, procedures, customer service, record keeping, purchasing procedures, inventory control systems, pricing, merchandising, reference materials, ethics, roles, responsibilities, and relationships with patients and coworkers. Condition: 315361 Pharmacy Technician or 105231 Pharmacy Services Management program requirements met

### **Pharmacy Community Clinical**

10536138.....2 credits

Provides hands-on experience in a community pharmacy for 108 hours during term two. Areas of instruction include interpretation of prescriptions, entering prescriptions on computer, patient profiles, correctly filling and labeling prescriptions, billing patient and third parties, customer service, over-the-counter medications, purchasing, checking in deliveries, inventory control, compounding, and patient confidentiality.

Prerequisites: 10536110 Pharmaceutical Calculations, 10536120 Fundamentals of Reading Prescriptions, 10501102 Health Insurance & Reimbursement, 10536113 Pharmacy Business Applications; Condition: 315361 Pharmacy Technician, 105361 Pharmacy Services Management, or 615361 Community Retail Pharmacy Technician program requirements met

### **Pharmacy Computer Lab**

10536141.....2 credits

Expands the learner's ability to enter prescription orders and familiarizes learner with a variety of pharmacy software features, including updating pharmacy databases, running reports, and billing. This course is offered in a self-paced format.

Prerequisites: 10536120 Fundamentals of Reading Prescriptions; Condition: 315361 Pharmacy Technician or 105361 Pharmacy Services Management admissions requirements met

# Pharmacy Drug Distribution Systems 10536125......2 credits

Is an introductory study of the basic drug distribution systems used in community and institutional pharmacies, including automation technology, pharmacist and pharmacy technician roles, and dispensing considerations.

Condition: 315361 Pharmacy Technician or 105361 Pharmacy Services Management admissions requirements met

# Pharmacy Hospital Clinical

10536143.....2 credits

Provides the learner with the skills to prepare parenteral admixtures, fill medication carts and unit-dose drawers, control inventory, package medications, and maintain patient records in the hospital setting.

Prerequisites: 10536110 Pharmacy Calculations and Corequisite: 10536139 Pharmacy Community Clinical, 10536126 Pharmacy Parenteral Admixtures and 10536141 Pharmacy Computer Lab; Condition: 315361 Pharmacy Technician, or 105361 Pharmacy Services Management admissions requirements met

### Pharmacy Law

10536115.....2 credits

Introduces the learner to federal and state regulations that apply to pharmacy practice.

Condition: 315361 Pharmacy Technician, 105361 Pharmacy Services Management, or 195361 Employed Pharmacy Technician admissions requirements met

### Pharmacy Parenteral Admixtures

10536126.....3 credits

Provides the learner with the skills to utilize aseptic technique in vertical and horizontal laminar flow hoods for preparation of solutions and medications to be administered intravenously, intramuscularly, subcutaneously, and intradermally to patients.

Prerequisite: 10536110 Pharmaceutical Calculations; Condition: 315361 Pharmacy Technician, 105361 Pharmacy Services Management, or 195361 Employed Pharmacy Technician admission requirements met

### **Principles of Sustainability**

10806112 ......3 credits

Prepares students to develop sustainable literacy, analyze interconnections among physical and biological sciences and environmental systems, summarize effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal/recycling in the U.S., and analyze approaches used by your community. Corequisite: 10838105 Intro Reading and Study Skills or Reading placement assessment equivalent

### **Purchasing**

10182108 ......3 credits

Introduces the participant to basic purchasing, quality specifications, inventory control, supplier selection, price aspects, research and measurement, negotiation, and global purchasing. This course is exciting for anyone interested in working in a challenging and rewarding purchasing and supply chain management career.

# Service Operations Management 10182102 ......3 credits

Introduces the student to the basic coverage of the concepts and current issues in service operation management. Topics include the value equation in operations management; understanding services; building the service system; operating the service system; enterprise resource management (ERP); and supply chain management concepts in the service sector.

### Supervision 2

10196191 ......3 credits

Applies skills and tools necessary to perform the functions of a contemporary frontline leader. Students engage in operational planning, analyze organizational structures, review the staffing process, employ techniques to enhance employee personal and group effectiveness, and develop control techniques to measure effectiveness in the above areas.



# PHARMACY TECHNICIAN

**Technical Diploma** 

Program Code: 31-536-1

**Total Credits: 32** 

Mid-State's Pharmacy Technician program provides hands-on learning that prepares students to assist licensed pharmacists in safely dispensing prescription medication. Graduates may work in hospital and retail pharmacies, nursing homes, and everywhere medications are prepared. In this program, you'll receive both lab and clinical experience in using pharmacy software to build patient profiles, as well as interpret and enter prescriptions. Core program courses are offered via video conference hosted by Lakeshore Technical College (LTC) and are supported by select classes available with Mid-State.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- □ Other:\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





**ADAMS CAMPUS** 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

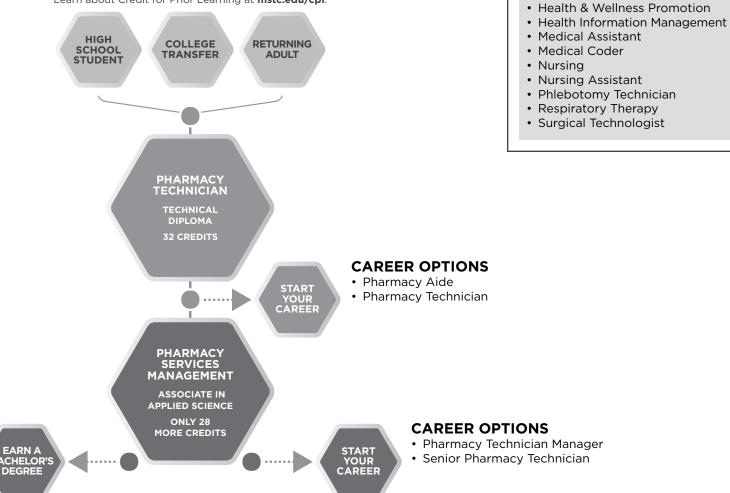
Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

**OTHER OPTIONS** 

**RELATED PROGRAMS** 

• Central Service Technician

### **PROGRAM OUTCOMES**

Employers will expect you, as a Pharmacy Technician graduate, to be able to:

- Demonstrate personal/interpersonal knowledge and skills in the practice of pharmacy.
- Demonstrate foundational professional knowledge and skills for the practice of pharmacy.
- Prepare prescriptions/medication orders and pharmaceutical products for dispensing, distribution, and disposal.
- Compound sterile and non-sterile medications.
- Follow established policies and procedures for procurement, billing, reimbursement, and inventory management.
- Utilize pharmacy technology and informatics.
- Adhere to state and federal regulations governing the practice of pharmacy.
- Apply the principles of quality assurance to the practice of pharmacy.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in the Pharmacy Community Clinical and Pharmacy Hospital Clinical courses.

### **ADMISSIONS PROCEDURES**

To apply to the Pharmacy Technician program, please submit the following documents to Lakeshore Technical College (LTC):

- 1. Complete a WTCS application form and return it with the \$30 non-refundable application fee. Check is payable to LTC.
- 2. Complete the Accuplacer or ACT test. Minimum scores required:
  - Arithmetic Accuplacer score of 50
  - ACT equivalents are acceptable

You may take the Accuplacer again if you did not meet the required scores. Additional options, including coursework and tutoring, are also available to assist you. To learn about your options or schedule an Accuplacer test, contact the Student Services & Information Center on your Mid-State campus.

- 3. Submit an official copy of all academic transcripts, including high school, college or university, and HSED/GED.
- 4. Complete a Background Information Disclosure (BID) form and submit \$16 for Caregiver Background check. The Wisconsin Caregiver Law requires a background check.
- 5. Complete health form and immunization records.
- 6. Read, sign, and return the Technical Standards Statement of Understanding form.
- 7. Read, sign, and return the sign-off sheet for the Pharmacy Technician Program Handbook.

- Complete a telephone program advising session with LTC counselor.
- Upon receipt of the above materials, you will be accepted to Lakeshore Technical College. LTC will then notify you of additional program requirements.

Lakeshore Technical College • Admissions 1290 North Avenue, Cleveland, WI 53015-1414

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

### **CREDIT FOR PRIOR LEARNING**

Credit for Prior Learning is available for certain courses in the form of high school advanced standing, transfer credit, test credit, military experience, and experiential credit.

### **CLINICAL-RELATED REQUIREMENTS**

Clinical sites have the right to refuse a student's admission based on conviction records. If you have a criminal history, you may not be able to complete clinical courses. Also, clinical agencies will be notified of all students with pending charges and convictions, and agencies can decline student admission to that agency.

### **STUDENT HANDBOOK**

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

NOTES:		

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing 10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### SAMPLE FULL-TIME CURRICULUM OPTION

Term	18 c	redits
10501101	Medical Terminology 🗹	3
10501102	Health Insurance and Reimbursement*	3
10536110	Pharmaceutical Calculations*	3
10536113	Pharmacy Business Applications*	3
10536115	Pharmacy Law*	2
10536120	Fundamentals of Reading Prescriptions*	1
10536122	Pharmacology*	3
Term	14 c	redits
10576105	Dharmaey Drug Distribution Systems*	2

4 credits
* 2
3
2
2
2
3

### **Total Credits 32**

\*These courses are offered through Lakeshore Technical College but may be taken via Telepresence at Mid-State's Stevens Point campus.

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

### **Fundamentals of Reading Prescriptions** 10536120.....1 credit

Prepares the learner to work in a community or hospital pharmacy by exploring the role of a pharmacy technician within the healthcare team, examining each step in the prescription filling process, and identifying the key top 200 drugs by brand and generic name and therapeutic class. Condition: 315361 Pharmacy Technician admission requirements met

### **Health Insurance and Reimbursement** 10501102 ......3 credits

Provides the learner with an understanding of the various types of insurance and managed care plans, and the cycle of medical claims procession. The learner will review cases. develop critical thinking skills in analyzing information, and selecting processes for reimbursement success.

### **Medical Terminology I**

10501101...... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Learners practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

### Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Pharmaceutical Calculations**

10536110 .....3 credits

Prepares the learner to enlarge and reduce formulas and solve proportions, dilutions, allegations, and other calculations pertinent to the preparation of pharmaceuticals using metric, apothecary, avoirdupois, and household measuring systems.

Condition: 315361 Pharmacy Technician, 105361 Pharmacy Services Management, or 195316 Employed Pharmacy Technician admission requirements met

### Pharmacology

10536122 ......3 credits

Enhances the learner's ability to act and react appropriately in the pharmacy by learning how drugs work through examination of the anatomy, physiology, pathophysiology, and drug therapy for each of the major systems. Condition: 315361 Pharmacy Technician, 105361 Pharmacy Services Management, 615361 Community Retail Pharmacy Technician, or 195361 Employed Pharmacy Technician admissions requirements met

### **Pharmacy Business Applications**

10536113.....3 credits

Prepares the learner to utilize pharmaceutical business terminology, procedures, customer service, record keeping, purchasing procedures, inventory control systems, pricing, merchandising, reference materials, ethics, roles, responsibilities, and relationships with patients and coworkers. Condition: 315361 Pharmacy Technician or 105231 Pharmacy Services Management program requirements met

### **Pharmacy Community Clinical** 10536138 ......2 credits

Provides hands-on experience in a community pharmacy for 108 hours during term two. Areas of instruction include interpretation of prescriptions, entering prescriptions on computer, patient profiles, correctly filling and labeling prescriptions, billing patient and third parties, customer service, over-the-counter medications, purchasing, checking in deliveries, inventory control, compounding, and patient confidentiality.

Prerequisites: 10536110 Pharmaceutical Calculations, 10536120 Fundamentals of Reading Prescriptions, 10501102 Health Insurance & Reimbursement, 10536113 Pharmacy Business Applications; Condition: 315361 Pharmacy Technician, 105361 Pharmacy Services Management, or 615361 Community Retail Pharmacy Technician program requirements met

### **Pharmacy Computer Lab** 10536141.....2 credits

Expands the learner's ability to enter prescription orders and familiarizes learner with a variety of pharmacy software features, including updating pharmacy databases, running reports, and billing. This course is offered in a self-paced format.

Prerequisites: 10536120 Fundamentals of Reading Prescriptions: Condition: 315361 Pharmacy Technician or 105361 Pharmacy Services Management admissions requirements met

### **Pharmacy Drug Distribution Systems** 10536125 ......2 credits

Is an introductory study of the basic drug distribution systems used in community and institutional pharmacies, including automation technology, pharmacist and pharmacy technician roles, and dispensing considerations.

Condition: 315361 Pharmacy Technician or 105361 Pharmacy Services Management admissions requirements met

# Pharmacy Hospital Clinical

10536143.....2 credits

Provides the learner with the skills to prepare parenteral admixtures, fill medication carts and unit-dose drawers, control inventory, package medications, and maintain patient records in the hospital setting.

Prerequisites: 10536110 Pharmacy Calculations and Corequisite: 10536139 Pharmacy Community Clinical, 10536126 Pharmacy Parenteral Admixtures and 10536141 Pharmacy Computer Lab; Condition: 315361 Pharmacy Technician, or 105361 Pharmacy Services Management admissions requirements met

### **Pharmacy Law**

10536115.....2 credits

Introduces the learner to federal and state regulations that apply to pharmacy practice.

Condition: 315361 Pharmacy Technician, 105361 Pharmacy Services Management, or 195361 Employed Pharmacy Technician admissions requirements met

### **Pharmacy Parenteral Admixtures** 10536126.....3 credits

Provides the learner with the skills to utilize aseptic technique in vertical and horizontal laminar flow hoods for preparation of solutions and medications to be administered intravenously, intramuscularly, subcutaneously, and intradermally to patients.

Prerequisite: 10536110 Pharmaceutical Calculations; Condition: 315361 Pharmacy Technician, 105361 Pharmacy Services Management, or 195361 Employed Pharmacy Technician admission requirements met



# PHLEBOTOMY TECHNICIAN

Technical Diploma

Program Code: 30-513-1

**Total Credits: 13** 

Mid-State's Phlebotomy Technician program teaches blood collecting techniques to provide samples for lab analysis, including venipuncture, skin punctures, and arterial punctures. You will also learn to perform various lab procedures, including specimen processing. Our program is among the few in Wisconsin approved by the National Accrediting Agency for Clinical Laboratory Sciences. The course of study is quick and hands on, with a practicum at a regional health care agency. Graduates are prepared to take a voluntary national certification exam.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- ☐ Criminal Background Statement of Understanding and Release of Information Form
- □ Other:

mstc.edu 888.575.6782 TTY: 711





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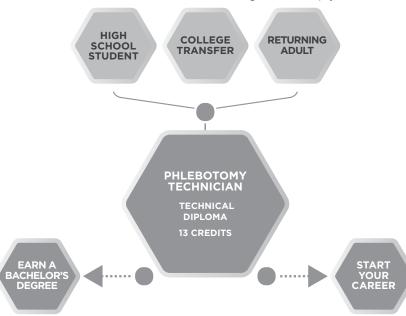
500 32nd Street North Wisconsin Rapids, WI 54494

# **CAREER PATHWAY**

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College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **OTHER OPTIONS**

### **RELATED PROGRAMS**

- Central Service Technician
- Health & Wellness Promotion
- Health Information Management
- Medical Assistant
- Medical Coder
- Nursing
- Nursing Assistant
- Pharmacy Services Management
- Pharmacy Technician
- Respiratory Therapy
- Surgical Technologist

### **CAREER OPTIONS**

- Phlebotomist
- Laboratory Assistant
- Blood Donor Specialist

### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

### **PROGRAM OUTCOMES**

Employers will expect you, as a Phlebotomy Technician graduate, to be able to:

- Adhere to infection control and safe practices.
- · Perform specimen collection.
- Process specimens.
- · Comply with legal regulations.
- · Model professional behaviors.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students who successfully pass the Phlebotomy Clinical will meet the requirements of the TSA.

The Phlebotomy Technician program is approved by the National Accrediting Agency for Clinical Laboratory Sciences, one of only three approved programs in Wisconsin. Graduates are also prepared to take a national certification exam. However, taking and passing a national exam is not a graduation requirement.

### National Accrediting Agency for Clinical Laboratory Sciences

5600 N. River Road Suite 720 Rosemont, IL 60018-5119 773.714.8880 • www.naacls.org

### **ADDITIONAL ENTRY CRITERIA**

To apply to the Phlebotomy Technician program, please submit the following documents to Mid-State Admissions:

 Criminal Background Statement of Understanding and Release of Information form.

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a phlebotomy technician is available at mstc.edu/programs/phlebotomy-technician. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

### **CLINICAL-RELATED REQUIREMENTS**

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.

### PROGRAM PROGRESSION

In order to maintain a passing status and progress in the program, students must:

- Receive a grade of "C" or better in all courses required for graduation.
- Repeat courses not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequisites.

Please note that the ability to repeat courses is dependent upon availability in courses. Students may be required to apply for program re-entry in order to repeat courses within the program's instructional area. All first-semester courses must be completed with a grade of "C" or better to progress to core classes in the second semester.

Students will receive three attempts to pass any 10-513 course. If a passing grade is not achieved in three attempts, the student will be permanently withdrawn from the program or program waiting list. A withdrawal grade of "W" counts as one attempt for the course. Requests for special consideration should be directed to the associate dean of the School of Health.

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

# GPS for Student Success 10890102 ......1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

# Intro to College Reading 10838104 .....2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

### Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### SAMPLE FULL-TIME CURRICULUM OPTION

Term		13 credits
10501101	Medical Terminology 🗹	3
10501104	Culture of Healthcare	2
10513110	Basic Lab Skills	1
10513111	Phlebotomy	2
10513117	Phlebotomy Clinical	2
31509302	Human Body in Health and Disease	3
	Total	credits 13

☑ This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10501101 31509302	Medical Terminology & Human Body in Health and Disease	6 credits 3 3
<b>Term</b> 10501104 10513110 10513111 10513117	Culture of Healthcare Basic Lab Skills Phlebotomy Phlebotomy Clinical	7 credits 2 1 2 2 2
	Total	credits 13

### **Basic Lab Skills**

### 10513110 ......1 credit

Explores laboratory science career options and the fundamental principles and procedures performed in the laboratory. You will utilize medical terminology and basic laboratory equipment. You will follow required safety and infection control procedures and perform simple laboratory tests.

Prerequisite: Admission to Phlebotomy program 305131

### **Culture of Healthcare**

### 10501104.....2 credits

An introduction to the culture of healthcare for students interested in working in various healthcare settings. Learners examine professionalism, interpersonal and written communication skills, problem-solving skills and patient privacy and confidentiality issues as they relate to healthcare.

## Human Body in Health and Disease

### 31509302 ......3 credits

Focuses on diseases that are frequently first diagnosed and treated in the medical office setting. Students learn to recognize the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis and prevention of common diseases.

### **Medical Terminology G**

### 10501101...... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Learners practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

### **Phlebotomy**

### 10513111 ......2 credits

Provides opportunities for learners to perform routine venipuncture, routine capillary puncture and special collection procedures.

Prerequisite: Admission to Phlebotomy program 305131

### **Phlebotomy Clinical**

### 10513117.....2 credits

Prepares the learner to function as a staff member in a medical laboratory setting performing venipuncture and other specimen collection procedures, processing and handling of laboratory specimens, and performing related duties. There is no remuneration for students enrolled in this course.

Corequisite: Phlebotomy 10513111 and Basic Lab Skills 10513111 with a grade of "C" or better.



# PRECISION MACHINING **TECHNICIAN**

**Technical Diploma** 

**Program Code: 31-420-10** 

**Total Credits: 51-52** 

The Precision Machining Technician program prepares graduates for machining positions, an in-demand skill set at the heart of industrial production. Additional training and experience often lead to supervisory, quality assurance, and tool maker positions. In this program you will learn to shape various materials into intricate, precise, usable parts. You'll also work from blueprints and written specifications to select the proper machinery, materials, and tools, and you'll gain proficiency with machine tools such as lathes, mills, grinders, computers, and computerized numerical control (CNC) machines.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

With:

When:\_\_\_

- Official Transcripts Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- Other:

mstc.edu 888.575.6782 TTY: 711





ADAMS CAMPUS 401 North Main Adams, WI 53910

MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449

STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481

WISCONSIN RAPIDS CAMPUS 500 32nd Street North

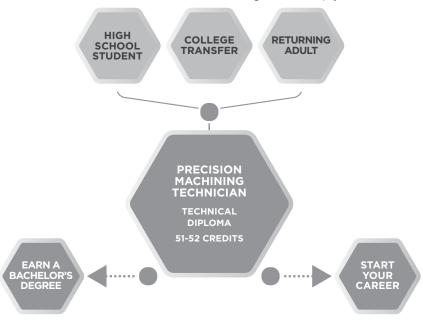
Wisconsin Rapids, WI 54494

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College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **OTHER OPTIONS**

### **RELATED PROGRAMS**

- Industrial Mechanical Technician
- Manufacturing Operations Management
- · Stainless Steel Welding
- · Welding

# APPRENTICESHIP OPPORTUNITIES

• Machinist Apprenticeship

### **CAREER OPTIONS**

- Advanced Machine Operator
- CNC Machine Operator
- Job Shop Machinist
- Apprenticeship

### **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

### **PROGRAM OUTCOMES**

Employers will expect you, as a Precision Machining Technician graduate, to be able to:

- Apply basic safety practices in the machine shop.
- Interpret industrial/engineering drawings.
- Apply precision measuring methods to parts inspection.
- Perform basic machine tool equipment setup and operation.
- Perform programming, setup, and operation of CNC machine tools.
- Perform advanced CNC machining operations.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

# **NOTES:**

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### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 31804305	13-14 cred	
31004303	Applied Mathematics &	2
10804107	College Mathematics 🗹	3
32420311	Safety, Measurement, and Layout	1
32420326	Introduction to Turning Machines	2 5
32420329 32420373	Intermediate Turning Applications CNC Lathes Set Up and Operation	2
32623302	Print Reading for Machine Tool	1
Term	12 cred	lits
31801368	Workplace Communication	1
32420310	Introduction to Solid Modeling	2
32420337 32420340	Introduction to Milling Machines Intermediate Milling Applications	2 5
32420374	CNC Mills Set Up and Operation	2
Term	12 cred	lits
32420312	Metals Science	2
32420325	Inspection with Geometric Dimensioning	2
32420330 32420362	Advanced Turning Applications CNC Lathes/Manual Programming	2 3 2
32444377	CNC Lathes Computer Aided Programming	2
32623301	Manufacturing Principles	1
Term	14 cred	lits
32420341	Advanced Milling Applications	3
32420364	CNC Mills/Manual Programming	2
32420380 32444378	Multi-Axis Machining Processes CNC Mills Computer Aided Programming	2 3 3 3
32444379	Advanced CNC Milling Operations	3
	Total credits 51	·52

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

### SAMPLE PART-TIME CURRICULUM OPTION

Term		6-7 credits
31804305	Applied Mathematics <b>☑</b> -or-	2
10804107 32420311 32420326 32623302	College Mathematics  Safety, Measurement, and Layout Introduction to Turning Machines Print Reading for Machine Tool	3 1 2 1
<b>Term</b> 32420310 32420312 32420337	Introduction to Solid Modeling Metals Science Introduction to Milling Machines	6 credits 2 2 2
<b>Term</b> 32420329 32623301	Intermediate Turning Applications Manufacturing Principles	6 credits 5
<b>Term</b> 32420340 32623301	Intermediate Milling Applications Manufacturing Principles	<b>6 credits</b> 5 1
<b>Term</b> 31801368 32420325	Workplace Communication Inspection with Geometric Dimens	6 credits 1 sioning 2
32420323	Advanced Turning Applications	3
<b>Term</b> 32420341 32420364 32444378	Advanced Milling Applications CNC Mills/Manual Programming CNC Mills Computer Aided Program	8 credits 3 2 mming 3
<b>Term</b> 32420373 32420362 32444377	CNC Lathes Set Up and Operation CNC Lathes/Manual Programming CNC Lathes Computer Aided Prog	<b>z</b> 2
<b>Term</b> 32420380 32444379	Multi-Axis Machining Processes Advanced CNC Milling Operations	6 credits 3 3
	Total cı	redits 51-52

### **Advanced CNC Milling Operations** 32444379 .....3 credits

This course will utilize classroom presentations, discussions and hands-on lab activities to build on the skills from previous classroom experiences to equip learners to follow the entire process of manufacturing from print to part and through final inspection using CNC milling machines. Learners will explore in-process automated part inspection with the use of machine based probing systems. Additionally, students will become accustom to the use of Wire EDM machines and Coordinate Measuring Machines as they progress through the course.

Corequisite: CNC Mills/Manual Programming 32420364

### **Advanced Milling Applications** 32420341.....3 credits

Students in this class will receive further insight into milling machine concepts. This course places major emphasis on work-holding methods with the use of jigs and fixtures. Jig and fixture design elements for location and rigid work holding in both a production environment as well as single piece runs, and advanced cutting tools and cutting processes will be explored to focus on manufacturing

Prerequisite: Intermediate Milling Applications 32420340

### **Advanced Turning Applications** 32420330 .....3 credits

Students in this class will receive further insight into turning machine concepts. This course includes a safety review and adds depth in advanced cutting tool materials such as ceramics, cubic boron nitride (CBN), and polycrystalline diamonds (PCD). Learners will explore differing fixturing and tooling needs for a production environment as well as planning for single piece runs.

Prerequisite: Intermediate Turning Applications 32420329

### 

31804305......2 credits

Students taking Applied Math I make and convert various measurements. Students use formulas to solve problems. They compute dimensions of geometric shapes. Students use statistical tools to represent and analyze data. They analyze various financial situations. Students use basic right triangle trigonometry to solve problems. In each topic area, students solve application problems.

### **CNC Lathes Computer Aided Programming** 32444377.....2 credits

This course introduces learners to Computer-Aided Machining/Manufacturing (CAM). Demonstrations and handson use of CAD/CAM software and hardware will be used. Major emphasis is placed on geometry creation and editing functions, process planning, proper cutter selection, feed and speed selection, and tool path generation along with post processing to CNC lathes. Some basic machine set-up and operation are included to verify program operation. Prerequisite: Introduction to Solid Modeling 32420310

### **CNC Lathes Set Up and Operation** 32420373.....2 credits

In this introductory Computer Numerical Control (CNC) machining course, students will practice the skills needed to setup and operate CNC lathes. Classroom presentations and lab projects will focus on safety, theory, terminology as it relates to completing machine setups in the CNC lathe. Topics covered will be tool and work offset setting. work holding and quality. Learners will work with proven CNC part programs and setup documents to create parts to specifications and ensure all parts of a production run maintain quality throughout the run.

### CNC Lathes/Manual Programming & 32420362 .....2 credits

Covers NC/CNC terminology and introduces students to computers and components of NC/CNC lathes. All programming is manual word address (G+M Code) basics. Includes basic CNC lathe operation.

### **CNC Mills Computer Aided Programming** 32444378.....3 credits

This course introduces learners to Computer-Aided Machining/Manufacturing (CAM). Demonstrations and hands-on of CAD/CAM software and hardware will be used. Major emphasis is placed on geometry creation and editing functions, process planning, proper cutter selection, feed and speed selection, and tool path generation along with post processing to CNC milling machines and machining centers. Some basic machine set-up and operation are included to verify program operation.

Prerequisite: Introduction to Solid Modeling 32420310

### **CNC Mills Set Up and Operation** 32420374.....2 credits

In this introductory Computer Numerical Control (CNC) machining course, students will practice the skills needed to setup and operate CNC milling machines. Classroom presentations and lab projects will focus on safety, theory, terminology as it relates to completing machine setups in the CNC milling machine. Topics covered will be tool and work offset setting, work holding and quality. Learners will work with proven CNC part programs and setup documents to create parts to specifications and ensure all parts of a production run maintain quality throughout the run.

### **CNC Mills/Manual Programming** 32420364 ......2 credits

Covers NC/CNC terminology and introduces students to computers and components of NC/CNC mills. All programming is manual word address (G+M code) basics. Includes basic CNC mill operation.

### College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### **Inspection with Geometric Dimensioning** 32420325.....2 credits

This course will familiarize learners with interpreting Geometric Dimensioning and introduce dimensional metrology. Activities and classroom presentations will provide insight into the use of direct and indirect measuring tools, instrument calibration, and the use of Coordinate Measuring Machines, and quality documentation. Emphasis of the course will be on interpretation of Geometric Dimensioning and using metrology fundamentals to ensure manufactured components meet design specifications.

### **Intermediate Milling Applications** 32420340 .....5 credits

This course will develop additional skills needed for effective milling machine operations. Common work holding and fix turing tools will be utilized to create parts accurately and efficiently. Classroom presentation and lab activities will be utilized to hone the learner's skills with manual milling machines. Attention will be on safety, machine setups, operations, calculations, and inspection.

Corequisite: Introduction to Milling Machines 32420337

### **Intermediate Turning Applications** 32420329 .....5 credits

Students enrolled in this course will build additional skills from previous classroom experiences related to turning machines. Presentations and lab activities will focus on machine setups, metal removal techniques, and common calculations encountered on the job. Lab projects will be created using techniques to ensure accuracy, efficiency, and repeatability with an introduction to CNC. Emphasis will be put on common turning procedures with inspection processes to produce quality components. Corequisite: Introduction to Turning Machines 32420326

### **Introduction to Milling Machines** 32420337.....2 credits

Explore the fundamentals of basic operations and safety of manual mills. Through the utilization of classroom and lab activities learners will acquire a basic understanding of the Milling Machine components as well as the cutting tools and basic work holding devices that may be used on the machine. The importance of proper tool selection and usage as utilizing the Milling Machines components properly will be the concentration.

### **Introduction to Solid Modeling** 32420310 ......2 credits

Introduces students creating computer-aided drafting (CAD) represented solid models for use in the manufacturing arena. As an introductory course in three-dimensional modeling, learners use computer software to develop two-dimensional sketches and use modeling tools to create solid models on the computer. Students also use the models to create and detail two-dimensional engineering drawings for use on the manufacturing floor. Computer knowledge and prior knowledge of drawing/drafting techniques is recommended.

### **Introduction to Turning Machines** 32420326 .....2 credits

This course will introduce functions and capabilities of turning machines known as lathes. Activities and hands-on lab exercises will be used to introduce learners to the most common applications of lathes in the machine shop. Shop safety, terminology, and identification of turning machines and related equipment in a machine shop environment will be introduced. Learners will also gain an understanding of basic setup and metal cutting processes performed on turning machines.

### **Manufacturing Principles** 32623301 .....1 credit

As competition for market share continues to increase, manufacturers rely on innovations in technology, methods, and practices to give them the edge they need. To remain competitive globally, the watchwords are productivity, efficiency, and quality. In this course, students examine some of the practices that many manufacturing operations have come to rely on to make their operations competitive, efficient, and cost-effective. Topics covered in this class include the principles of lean manufacturing, value versus non-value added waste, 5S methodology, value stream mapping, setup reduction and guick changeover, cellular flow, building a lean culture, total productive maintenance, and statistical process control (SPC).

### **Metals Science**

### 32420312 .....2 credits

Introduces the field of metallurgy. Covers sources of common metals, including both ferrous and non-ferrous methods of ore extraction, and refining and classification of these metals and the alloy systems. The heat treatment of various metals and properties of metals are studied, including lab work on shear, compression, tensile strength, and corrosion.

# Multi-Axis Machining Processes 32420380 ......3 credits

Multi-Axis CNC machines have become standard in the machining industry. Participants in this course will become familiar with the set-up procedures for 4 and 5 axis milling machines, manual programming techniques, and advanced CAM programming for multi-axis positioning and contouring. Lab activities and classroom presentations will prepare students for the added machining versatility of multi-axis machines.

Prerequisites: CNC Lathes Set Up and Operation 32420373 and CNC Mills Set Up and Operation 32420374

# Print Reading for Machine Tool 32623302.....1 credit

Technical drawings are the heart of the manufacturing process. This course will develop proficiency with the visualization of multi-view orthographic projection drawings, interpretation of print symbols, dimensioning standards, tolerance standards, assembly drawings, section and auxiliary views. Included in this course will be hands on drawing and interpretation of prints as well as classroom presentations.

### Safety, Measurement and Layout 32420311......1 credits

In this course students become familiar with the machine shop environment. An overview of safety is covered with emphasis in lathes, mills, cut-off machines, and grinders. Learners are also introduced to measurement with various types of precision measurement tools, including micrometers, height gages, and calipers.

# Workplace Communication 31801368 ......1 credit

Analyze workplace communication situations to develop professional verbal and written communication skills. Learners apply verbal and written communication skills, as well as conflict resolution strategies, to improve workplace communication climates and promote personal and professional growth.



# **PROJECT MANAGEMENT**

Technical Diploma

Program Code: 30-196-7

**Total Credits: 24** 

Mid-State's Project Management program prepares students to successfully lead a project toward completion. Graduates are prepared to lead both teams and individuals toward a common goal and effectively use problem solving, budgeting, technology and math skills, and effective communication. Through hands-on projects, you will learn how to manage and develop teams while practicing problem-solving analysis to effectively lead teams toward goal or project completion.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

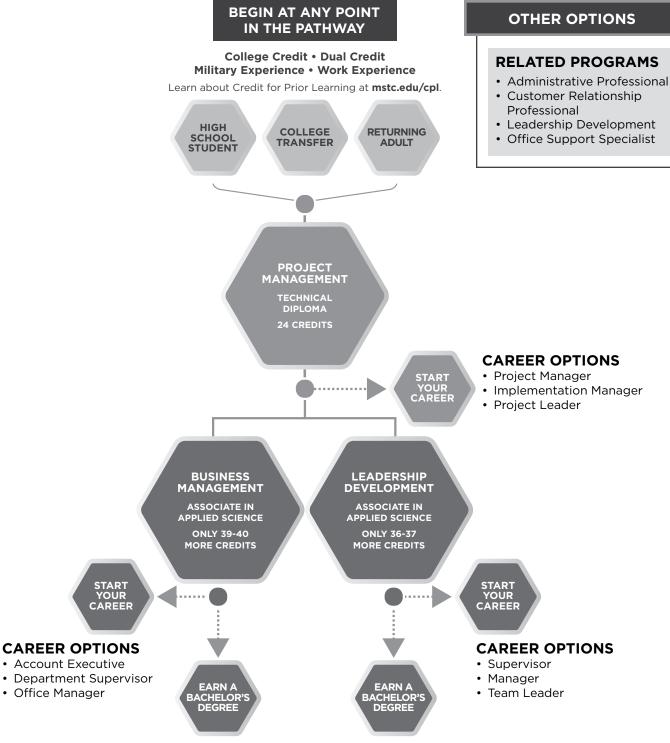
When:\_\_\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- ☐ Other:\_\_\_\_\_

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### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Marshfield of Wood County, UW-Oshkosh, UW-Stevens Point, UW-Stout, UW-Whitewater, Western Governor's University, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit **mstc.edu/transfer**.

### **BACHELOR'S DEGREE OPTIONS**

Herzing University and Indiana Wesleyan University

For more information and additional opportunities, visit **mstc.edu/transfer**.

### **PROGRAM OUTCOMES**

Employers will expect you, as a Project Management graduate, to be able to:

- Organize resources to achieve the goals of the organization.
- Direct individuals and/or processes to meet organizational goals.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will fulfill the TSA requirement in the Project Management course by completing a comprehensive business plan.

NOTES:		

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### GPS for Student Success 🗷

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### SAMPLE FULL-TIME CURRICULUM OPTION **Term** 12 credits 10102121 Finance and Budgeting Z 3 Microsoft Office-Introduction & 3 10103106 10801136 English Composition 12 3 10801196 Oral/Interpersonal Communication & **Term** 12 credits 10196188 Project Management 10196189 Team Building & Problem Solving 3 10196192 Managing for Quality 3 10804107 College Mathematics Z 3 **Total credits 24**

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

### SAMPLE PART-TIME CURRICULUM OPTION **Term** 9 credits 10102121 Finance and Budgeting Z 3 Microsoft Office-Introduction & 3 10103106 College Mathematics 🗹 10804107 3 9 credits **Term** 10196189 Team Building & Problem Solving 10801136 English Composition 1 2 3 10801196 Oral/Interpersonal Communication & & Term 6 credits 10196188 Project Management 3 10196192 3 Managing for Quality **Total credits 24**

NOTES:		

### College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### English Composition 1 2

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

### Finance and Budgeting 🗹

10102121 ......3 credits

For the nonfinancial manager, this course introduces the language of accounting, finance, and budgeting. Provides an overview of the use and analysis of financial statements. Business planning and the foundations and development of budgets are explored. Business financing basics and the securing of necessary financing for a business are covered. Practical application of financial statement creation and analysis, budgetary activities, and finance calculations are included.

### **Managing for Quality**

10196192.....3 credits

Apply skills and tools necessary to implement and maintain a continuous improvement environment. Each learner will demonstrate the application of a personal philosophy of quality, identify stakeholder relationships, identify ways to meet/exceed customer expectations, apply a systems-focused approach, use quality models and tools, manage a quality improvement project, and measure effectiveness of continuous improvement activities.

### 

10103106 ......3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing the students' knowledge of computer concepts, Windows Explorer, and web usage. Students should possess basic keyboarding, mouse and Windows 10 skills. Students may develop these skills in the LiNK while concurrently enrolled in this course.

# Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Project Management

10196188.....3 credits

Applies skills and tools necessary to design, implement, and evaluate formal projects. Each learner will examine the role of project management, create a project charter, define project work scope, manage project risks, and develop a network diagram, project schedule, and project budget. *Prerequisite: Nine core credits from a 102, 103, 109, 196, or 623 program code.* 

# Team Building & Problem Solving 10196189 ......3 credits

Applies skills and tools necessary to facilitate problem solving in a team environment. Each learner assumes the roles and responsibilities of team leadership in the stages of team development, uses a systematic problem-solving process, and employs consensus-building and conflict-management strategies.



# RENEWABLE ENERGY TECHNICIAN

Associate in Applied Science (AAS)
Program Code: 10-482-3
Total Credits: 61

The only program of its kind in the Wisconsin Technical College System, Mid-State's Renewable Energy Technician program prepares students to design an integrated portfolio of renewable and traditional energy-producing systems. Graduates develop a working knowledge of "green" building concepts and energy-efficient design principles as well as the foundation needed for an entry-level position in the heating, ventilation, and air conditioning (HVAC) fields. In this program you'll learn to perform site assessments and recommend appropriate renewable energy technologies, sell and market renewable energy technologies, and manage renewable energy installation projects. Mid-State's unique facilities, a variety of brands of equipment and software for training, experienced faculty, and off-campus design opportunities make this program one-of-a-kind.

Estimated tuition and fees: mstc.edu/programcosts

### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

### **CHECKLIST:**

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

With:

When:

Official TranscriptsMid-State Technical College

Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481

☐ Other:	

mstc.edu

**ADAMS CAMPUS** 

401 North Main

Adams, WI 53910

TTY: 711

888.575.6782



MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive

1001 Centerpoint Drive Stevens Point, WI 54481

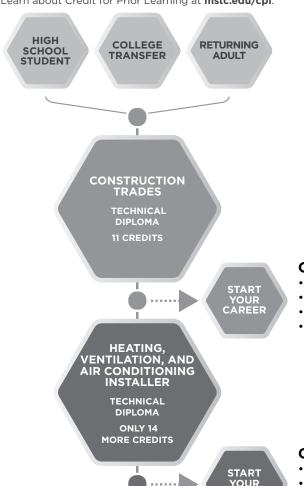
MID-STATE TECHNICAL COLLEGE

WISCONSIN RAPIDS CAMPUS 500 32nd Street North Wisconsin Rapids, WI 54494

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



### **OTHER OPTIONS**

# APPRENTICESHIP OPPORTUNITIES

- Carpenter Apprenticeship
- Construction Electrician (ABC) Apprenticeship
- Construction Electrician (IBEW-NECA) Apprenticeship
- Plumber Apprenticeship
- Steamfitter and Steamfitter Service Apprenticeship

### **CAREER OPTIONS**

- Electrical Contracting Laborer
- Carpentry Contracting Laborer
- Plumbing Contracting Laborer
- Apprenticeship

### **CAREER OPTIONS**

- Building Controls Technician
- Heating, Ventilation, and Air Conditioning Installer
- Heating and Air Conditioning Mechanic
- Apprenticeship

### CAREER OPTIONS

- Energy Load Estimator
- Renewable Energy Technical Sales Representative
- Solar Installer
- Apprenticeship

### **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-River Falls, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

YOUR

CAREER

For more information and additional opportunities, visit mstc.edu/transfer.

RENEWABLE ENERGY TECHNICIAN ASSOCIATE IN APPLIED SCIENCE ONLY 36

MORE CREDITS

### **PROGRAM OUTCOMES**

Employers will expect you, as a Renewable Energy Technician graduate, to be able to:

- Perform site assessments for solar photovoltaic, solar thermal, and small wind systems.
- Conduct feasibility studies regarding installation of renewable energy systems.
- Design an integrated portfolio of renewable energy systems.
- Respond to customer inquiries.
- Manage renewable energy system installation projects.
- Sell renewable energy systems.

### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will fulfill the TSA requirement in the Planning, Design, & Project Management 2 course.

NOTES:			

### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

### **GPS for Student Success**

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

### Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

# Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

### **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

### **SAMPLE FULL-TIME CURRICULUM OPTION**

Term	18 cred	its
10442117 10442118 10476171 10480101 10482107 10483121 10601110 10601130 10601140 10804107	Welding Fundamentals 1 & -or- Welding Fundamentals 2 & Safety for Construction Trades & Renewable Energy Overview Construction Fundamentals Piping Applications HVAC Heating Fundamentals Blueprint Reading for Construction Trades Electricity for the Construction Trades College Mathematics &	1 1 2 2 3 2 2 2 2 3
Term	16 cred	its
10483103 10483113 10483115 10601120 10601121 10623106 10801136	Electrical Components & Control Circuits Hydronics and Heat Pumps Energy Load Estimation and Modeling HVAC Air Conditioning Fundamentals Intro to HVAC Installation Intro to AutoCAD English Composition 1 2	2 3 2 2 1 3
Term	15 cred	its
10482104	Energy Storage Systems	3
10482110 10482140 10801196	Photovoltaic System Design & Installation 1 Planning, Design, & Project Management 1 Oral/Interpersonal Communication <b>*z - or-</b>	3
10801198	Speech 🗹	3
10809195	Economics &	3
Term	12 cred	its
10482106 10482141	Operations and Maintenance of PV Systems	3
10482141 10809166 10809188	Planning, Design, & Project Management 2 Intro to Ethics: Theory & Application & Developmental Psychology & -or-	3
10809198	Intro to Psychology 🗷	3
	Total credits	61

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

### SAMPLE PART-TIME CURRICULUM OPTION

Term	9 credits	s
10442117 10442118 10476171		1 1
10480101 10601140	Renewable Energy Overview	2
10804107		3
<b>Term</b> 10483113	Hydronics and Heat Pumps	<b>s</b>
10601120 10801136	HVAC Air Conditioning Fundamentals	2
Term	7 credi	_
10482107 10483121	Piping Applications	3
10601110		2
<b>Term</b> 10483102		2
10483115 10601121		3 2
10623106	Intro to AutoCAD	1
<b>Term</b> 10482104	8 credits Energy Storage Systems	<b>s</b>
10601130 10809195	Blueprint Reading for Construction Trades 2	2
Term	6 credits	_
10482140		3
<b>Term</b> 10482110	<b>9 credits</b> Photovoltaic System Design & Installation 1	<b>s</b>
10482141		3
10801196 10801198	Oral/Interpersonal Communication <b>z -or-</b> Speech <b>z</b>	3
Term	6 credits	S
10482106 10809188	Developmental Psychology & -or-	3
10809198	Intro to Psychology 🗹	3
	Total credits 6	1

# Blueprint Reading for Construction Trades 10601130......2 credits

Develops the ability to read blueprints for commercial and non-commercial structures. Emphasizes blueprints drawn by licensed architects, covering plumbing, electrical wiring, structural framing, millwork, interior and exterior details, and basic information.

# College Mathematics & 10804107 ......3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables. finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 10834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Construction Fundamentals

and methods used in construction, including footings and foundations, walls, floors, roofs and roof materials, exterior finishes, interior walls, ceiling and floor finishes, insulation types, vapor and air infiltration, and sound protection. Students also become familiar with blueprint reading and examine all trades associated with construction, including, electrical, HVAC, and plumbing. Safe use of the appropriate tools for each trade is covered.

# Developmental Psychology 10809188.....3 credits

others.

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/ 16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

### Economics &

10809195 .....3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Electrical Components & Control Circuits 10482103......2 credits

Topics include a review of AC/DC electricity fundamentals and the physical laws that apply to electronic circuits. Direct current (DC) covers basic definitions of voltage, current, and resistance and analysis of series and parallel resistive circuits. Alternating current (AC) includes an introduction to AC generation, capacitors, inductors, and transformers and their applications in electronic circuits. Additional topics include control circuits, symbols, diagrams, protection devices, relays, thermostats, single-phase motors, control components, and troubleshooting ACR system wiring diagrams.

Prerequisite: Electrical Circuits I 10605105 or Intro to Electronics 10605108 or Electricity for the Construction Trades 10601140

# Electricity for the Construction Trades 10601140......2 credits

This course is an introduction to electrical theory and application for those in the construction and building trades. Content includes AC and DC circuits, schematics, Ohms law, multimeter use and circuit troubleshooting. This course will also provide an introduction to the contents of the National Electric Code (NEC).

# Energy Load Estimation and Modeling 10483115.....3 credits

In this course students will develop the skills to do residential and light commercial energy load estimations. Students will calculate heating and cooling building loads and estimate energy consumption rates and quantities. The student will also estimate energy upgrades such as insulation, window improvements, etc. and calculating payback and fuel savings. The course covers a variety of computer programs available for analyzing buildings.

# Energy Storage Systems 10482104 ......3 credits

Students continue to develop their knowledge of photovoltaic systems by designing solar + storage systems for residential and small-commercial applications. The energy storage systems analyzed will include multiple battery technologies and system sizes. Students will plan the installation of a grid-connected energy storage system and an off-grid stationary or mobile system.

## English Composition 1 🗷

## 10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10831103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# HVAC Air Conditioning Fundamentals 10601120......2 credits

Topics include air conditioning principles and terms, physical principles of air movement, air filtering and humidity, and methods of conditioning air for comfort and health. Also covers the proper use of psychrometers, dry bulb thermometers, hygrometers, and reading and interpretation of psychrometric charts and scales as well as ASHRAE and BPI ventilation standards for residential units. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

# HVAC Heating Fundamentals 10601110.....2 credits

Provides an introduction to how homes and buildings are heated. Topics include introduction to heat principles, temperature measurement, fuels and other sources of heat, combustion, basic heating systems, basic furnace design, boiler design and operation, venting of furnaces, chimney or exhaust gases, and system controls. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

## Hydronics and Heat Pumps

## 10483113.....3 credits

Addresses solar thermal, geothermal, and biomass heating systems. Students participate in the installation and design of a solar hot water system. Topics include safety; system design and layout; component selection; mounting collectors; installing and insulating copper tubing; and installing a storage tank, heat exchanger, circulation pump, and other system components.

## Intro to AutoCAD

#### 10623106 .....1 credit

Learners will develop practical approaches to constructing basic 2D drawings in AutoCAD software by drawing, modifying, and assigning appropriate layer properties. Learners will also analyze length and area of shapes drawn in AutoCAD, summarize details through dimensions and annotations added to the drawings, and format the drawings for printing. Prior experience with computers is recommended.

# Intro to Ethics: Theory & Application & 10809166 ......3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to HVAC Installation

#### 10601121 .....2 credits

Addresses residential and light commercial heating and cooling systems. Emphasizes the diversity of heating and cooling systems and how they operate. Students participate in the installation of a variety of HVAC systems and troubleshoot and service systems. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

# Intro to Psychology & 10809198 ......3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Operations and Maintenance of PV Systems 10482106 ......3 credits

Introduces basic principles and best practices for operating and maintaining PV systems. Students will analyze performance evaluation techniques and develop procedures for maintaining and troubleshooting photovoltaic systems. Students will use diagnostic tools such as an I-V curve tracer, Insulation resistance meter, pyranometers, thermal imagers, clamp-on meters, and digital multimeters while gaining hands-on experience with commercial, residential and solar + storage systems.

# Oral/Interpersonal Communication & 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Photovoltaic System Design & Installation 1 10482110 ......3 credits

Students learn the details involved in the mechanical and electrical integration of a photovoltaic (PV) system. Topics include system components, product specifications, product integration, racking system design capabilities and limits, system diagramming, configurations, safety, common design mistakes and solutions, and installation techniques. Involves students in the installation of a PV system.

## **Piping Applications**

10483121.....3 credits

Presents the fundamentals of plumbing and piping installation practices. Laboratory activities provide students with basic pipe joining processes associated with the plumbing and HVAC industries.

# Planning, Design, & Project Management 1 10482140 ......3 credits

Students in this capstone course design an integrated portfolio of energy systems, incorporating renewable energy options into a conventional system. Each learner writes a project proposal, works with project teams, sequences project tasks, develops project budgets, and identifies project resources.

## Planning, Design, & Project Management 2 10482141 ......3 credits

A continuation of Planning, Design, & Project Management I. Students create a capstone project that incorporates traditional and renewable energy systems with an overall goal of peak energy efficiency and energy production. *Prerequisite: Planning, Design, & Project Management 1 10482140* 

## Renewable Energy Overview

10480101.....2 credits

Investigates the need for renewable energy systems and emerging careers in renewable energy. Students examine the basic design, function, cost, and other considerations associated with solar photovoltaic, solar thermal, wind, geothermal and biomass renewable energy systems. Students also explore energy efficiency and conservation methods.

# Safety for Construction Trades & 10476171......1 credit

The Safety for the Construction Trades course teaches construction related workers about their rights, employer responsibilities and how to identify, abate, avoid and prevent job related hazards. Students will familiarize themselves with the proper selection and use of personal protective equipment and safety requirements on a construction site for various activities. Course outcomes align with the training outcomes recommended by OSHA. Upon successful completion, students will receive an OSHA 10 Card.

## Speech 🗷

10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a ""C"" or better or equivalent.

## Welding Fundamentals 1 2

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes

of FCAW, GMAW, and OXY-Fuel cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

# Welding Fundamentals 2 ☑ 10442118 ......1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of GTAW, SMAW and Plasma cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.



# RESPIRATORY THERAPY

# Associate in Applied Science (AAS) Program Code: 10-515-1 Total Credits: 69

The Respiratory Therapy program at Mid-State prepares students to employ scientific principles to identify, treat, and prevent acute or chronic dysfunction of the cardiopulmonary system. Successful graduates work under medical direction in a variety of care settings. Students study airway management and life support, airway clearance therapies, pulmonary rehabilitation, medication administration, and the use of therapeutic medical gasses. The program combines classroom instruction and clinical experience with actual patients and equipment at local hospitals and agencies. Travel is required.

Estimated tuition and fees: mstc.edu/programcosts

## **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Criminal Background Statement of Understanding and Release of Information Form

Other:			

mstc.edu 888.575.6782 TTY: 711





**ADAMS CAMPUS** 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

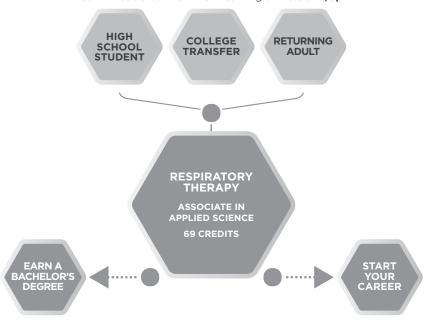
500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



#### **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Central Service Technician
- Health & Wellness Promotion
- Health Information Management
- Medical Assistant
- Medical Coder
- Nursing
- · Nursing Assistant
- Pharmacy Services Management
- Pharmacy Technician
- Phlebotomy Technician
- Surgical Technologist

## **CAREER OPTIONS**

- Respiratory Therapist
- Cardiopulmonary Technician
- Polysomnography (Sleep Lab) Technician

## **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Cardinal Stritch University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Oshkosh, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Respiratory Therapy graduate, to be able to:

- Apply advanced-level respiratory therapy concepts to patient care situations.
- Demonstrate technical proficiency required to fulfill the role of an advanced-level respiratory therapist.
- Practice respiratory therapy according to established professional and ethical standards.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students who successfully complete the NBRC exam at the end of the program will meet the TSA requirement.

Respiratory therapists in Wisconsin and many other states are licensed professionals. The Respiratory Therapy program is accredited by:

# Commission on Accreditation for Respiratory Care (CoARC)

264 Precision Boulevard, Telford, TN 37690 817.283.2835 • www.coarc.com

#### **ENTRY CRITERIA**

To apply to the Respiratory Therapy program, please submit the following documents to Mid-State Admissions:

- 1. Complete a Mid-State Application form and return it with a \$30 non-refundable application fee.
- 2. Submit the Criminal Background Statement of Understanding and Release of Information form found at mstc.edu/apply-mid-state-today (available after completion of program application).
- Submit the Technical Standards Form found at mstc.edu/ programs/respiratory-therapy.
- Meet with an advisor for your new student advising appointment.
- 5. Complete Accuplacer or ACT if requirements not met via High School Grade Point Average.

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

For placement on list to begin core Respiratory Therapy Program courses (515-level classes):

#### Meet math requirement via one of the following options:

- Math portion of Accuplacer with score of 79
- Math portion of Next Generation Accuplacer with score of 259
- Math ACT score of 18
- College Math or Introduction to Statistics with a final grade of "C" or better

## Meet the Prerequisite for General Anatomy and Physiology via one of the following options:

- General Chemistry or General Biology with "C" or better
- Human Body in Health and Disease with "C" or better
- · High School GPA of 3.0 or better
- High School GPA of 2.6 or better with "C" or better in 3 high school science classes

Verify completion of the above with assigned academic advisor.

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a respiratory therapist is available at **mstc.edu/programs/respiratory-therapy** Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

#### **CLINICAL-RELATED REQUIREMENTS**

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.

## PROGRAM PROGRESSION

In order to progress in and successfully complete the program, students must:

- Repeat courses not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of "C" or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability of courses. Students may be required to apply for program re-entry in order to repeat courses within the program's instructional area.

## STUDENT HANDBOOK NOTES: Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology. **GRADUATION REQUIREMENT** The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information. **GPS for Student Success** 10890102 .....1 credit Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement. ADDITIONAL COURSES AS NEEDED The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores. Intro to College Reading 10838104 ......2 credits Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources. Intro to College Writing 10831103 ......3 credits Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State. Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended. Pre-Algebra 10834109 ......3 credits Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses. Prerequisite: Accuplacer Math score of 65. Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## **SAMPLE FULL-TIME CURRICULUM OPTION**

<b>Term</b> 10501101 10515111 10515171 10801136 10806177	Medical Terminology & Respiratory Survey Respiratory Therapeutics 1 English Composition 1 & General Anatomy & Physiology &	6 credits 3 3 3 4
<b>Term</b> 10515172 10515173 10515174 10806197 10809166	Respiratory Therapeutics 2 Respiratory Pharmacology Respiratory/Cardiac Physiology Microbiology & Intro to Ethics: Theory & Application	6 credits 3 3 4 4 3
<b>Term</b> 10515175 10801196 10801198	Respiratory Clinical 1 Oral/Interpersonal Communication & Speech &	5 credits 2 -or-
<b>Term</b> 10515112 10515113 10515176 10515178 10515179 10809122 10809172 10809196	Respiratory Airway Management Respiratory Life Support Respiratory Disease Respiratory Clinical 2 Respiratory Clinical 3 Intro to American Government  -or- Introduction to Diversity Studies  -o Intro to Sociology  -	
<b>Term</b> 10515101 10515180 10515181 10515182 10515183 10809188 10809198	Respiratory Therapist Test Prep Respiratory Neo/Peds Care Respiratory/Cardio Diagnostics Respiratory Clinical 4 Respiratory Clinical 5 Developmental Psychology & -or- Intro to Psychology &	5 credits

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

## Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10501101 10801136	Medical Terminology & English Composition 1 &	6 credits 3 3
<b>Term</b> 10806177 10809122 10809172 10809196	General Anatomy & Physiology & Intro to American Government & -o Introduction to Diversity Studies & Intro to Sociology &	
<b>Term</b> 10806197 10809188 10809198	Microbiology & Developmental Psychology & -or-Intro to Psychology &	<b>7 credits</b> 4
<b>Term</b> 10801196 10801198 10809166	Oral/Interpersonal Communication Speech & Intro to Ethics: Theory & Application	3
<b>Term</b> 10515111 10515171	Respiratory Survey Respiratory Therapeutics 1	6 credits 3 3
<b>Term</b> 10515172 10515173 10515174	Respiratory Therapeutics 2 Respiratory Pharmacology Respiratory/Cardiac Physiology	9 credits 3 3 3
<b>Term</b> 10515175	Respiratory Clinical 1	2 credits
<b>Term</b> 10515112 10515113 10515176 10515178 10515179	Respiratory Airway Management Respiratory Life Support Respiratory Disease Respiratory Clinical 2 Respiratory Clinical 3	14 credits
<b>Term</b> 10515101 10515180 10515181 10515182 10515183	Respiratory Therapist Test Prep Respiratory Neo/Peds Care Respiratory/Cardio Diagnostics Respiratory Clinical 4 Respiratory Clinical 5	12 credits 1 2 3 3 3 credits 69

## Developmental Psychology &

10809188.....3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## English Composition 1 2

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

## General Anatomy & Physiology & 10806177...... 4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of

236 or ACT of 15, or General Chemistry 10806134 with a grade of "C" or better, or General Biology 10806114 with a grade of "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to American Government & 10809122.....3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Ethics: Theory & Application & 10809166 .....3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Psychology 2

10809198 .....3 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Intro to Sociology & 10809196 .....3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Introduction to Diversity Studies &

10809172.....3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237 or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Medical Terminology 2

10501101...... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Learners practice formation, analysis, and reconstruction of terms. Emphasizes spelling. definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

## Microbiology 2

10806197...... 4 credits

Examines microbial structure, metabolism, genetics, growth, and the relationship between humans and microorganisms. Disease production, epidemiology, host defense mechanisms, and the medical impact of microbes in the environment, industry, and biotechnology are also addressed. Prerequisite: General Anatomy & Physiology 10806177 with a "C" or better, or General Biology 10806114 with a "C" or better, or Plant Biology 10806184 with a grade of "C" or better

# Oral/Interpersonal Communication 2 10801196 ......3 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236, Writing of 237, or ACT of 15 Reading/16 Writing. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

# Respiratory Airway Management 10515112 ......2 credits

Provides a comprehensive exploration of airway management concepts and skills. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care.

Prerequisite: Respiratory Clinical 1 10515175

## **Respiratory Clinical 1**

10515175......2 credits

Introduces Respiratory Therapy practice in the hospital setting. Includes the development of skills such as basic therapeutics, patient assessment, medical record review, safety practices, patient interaction, and communication. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical learners must demonstrate competence in a minimum of 5 (required and/or simulated) competencies. The instructor may identify specific competencies to be addressed during this clinical. Prerequisites: Respiratory Survey 10515111, Respiratory Therapeutics 1 10515171, Respiratory Therapeutics 2 10515172, Respiratory Pharmacology 10515173, Respiratory/Cardiac Physiology 10515174, and Microbiology 10806197

## Respiratory Clinical 2

10515178.....3 credits

Continued development of Respiratory Therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing and interpreting data to make appropriate modifications in patient care. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical learners must demonstrate competence in a minimum of 12 (required and/or simulated) competencies (cumulative

through all clinical courses). The instructor may identify specific competencies to be addressed during this clinical. *Prerequisite: Respiratory Clinical 1 10515175* 

## Respiratory Clinical 3

10515179.....3 credits

Continued development of Respiratory Therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing and interpreting data to make appropriate modifications in patient care. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical learners must demonstrate competence in a minimum of 19 (required and/or simulated) competencies (cumulative through all clinical courses). The instructor may identify specific competencies to be addressed during this clinical. *Corequisite: Respiratory Clinical 2 10515178* 

## Respiratory Clinical 4

10515182.....3 credits

Continued development of Respiratory Therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing and interpreting data to make appropriate modifications in patient care. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical learners must demonstrate competence in a minimum of 26 (required and/or simulated) competencies (cumulative through all clinical courses). The instructor may identify specific competencies to be addressed during this clinical. *Prerequisite: Respiratory Life Support 10515113; Corequisite: Respiratory Clinical 3 10515179* 

## Respiratory Clinical 5

10515183.....3 credits

Focuses on the completion of respiratory therapy competencies and transition to employment. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. This course includes the complete program competency list. At the completion of this clinical learners must demonstrate competence in all of the required and required/simulated) competencies. The instructor may identify specific competencies to be addressed during this clinical. *Corequisite: Respiratory Clinical 4 10515182* 

## **Respiratory Disease**

10515176.....3 credits

Exploration of signs, symptoms, causes, progression, and treatment of diseases or disorders of the body that affect the respiratory cardiopulmonary system. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care.

Prerequisites: Respiratory Survey 10515111, General Anatomy & Physiology 10806177, and Microbiology 10806197

## **Respiratory Life Support**

10515113.....3 credits

Focuses on management of adult ventilatory support. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. Prerequisites: Respiratory Therapeutics 2 10515172 and Respiratory Clinical 1 10515175; Corequisite: Respiratory Airway Management 10515112

# Respiratory Neo/Peds Care 10515180 ......2 credits

Provides a comprehensive orientation to the field of neonatal and pediatric respiratory care to include fetal development, birth, neonatal physiology, pulmonary dynamics, abnormal cardiopulmonary conditions, diseases, noninvasive and invasive therapeutic interventions. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care. Prerequisite: Respiratory Life Support 10515113 and Respiratory Clinical 3 10515179

## **Respiratory Pharmacology**

10515173.....3 credits

Examines basic pharmacology principles, drug dosage, and calculations. Medications for inhalation including mucolytics, bronchodilators, and anti-inflammatories. Also includes cardiac drugs, anesthetic drugs, neuromuscular blockers, and antimicrobials. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care.

Prerequisites: Respiratory Survey 10515111, Respiratory Therapeutics 1 10515171, and General Anatomy & Physiology 10806177

## **Respiratory Survey**

10515111 .....3 credits

Examines the role of the Respiratory Therapist within the healthcare community. Reviews the ethical, legal, and regulatory principles that guide practice across diverse populations. Introductory patient assessment and critical thinking processes used in the development of respiratory care plans are explored. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care.

Prerequisites: Admission to Respiratory Therapy program 105151 and Accuplacer Arithmetic of 259, ACT of 18, College Math 10104107 or Introductory Statistics 10804189; Corequisites: Medical Terminology 10501101 and General Anatomy & Physiology 10806177

## **Respiratory Therapeutics 1**

10515171 .....3 credits

Introduces the topics of medical gas administration and humidity and aerosol therapy. The learner will apply physics, math and patient assessment concepts to oxygen, aerosol and humidity therapy. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care.

Prerequisites: Admission to Respiratory Therapy program 105151 and Accuplacer Arithmetic of 259, ACT of 18, College Math 10104107 or

Introductory Statistics 10804189; Corequisites: Respiratory Survey 10515111, Medical Terminology 10501101, and General Anatomy & Physiology 10806177

## **Respiratory Therapeutics 2**

10515172.....3 credits

Introduces therapeutic procedures including arterial puncture, bronchial hygiene, lung expansion therapy, and pulmonary rehabilitation. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care.

Prerequisites: Respiratory Therapeutics 1 10515171, Respiratory Survey 10515111, and General Anatomy & Physiology 10806177

## Respiratory Therapist Test Prep

10515101 ......1 credit

Explores strategies for preparing for respiratory therapist professional examinations including study skills, test-preparation skills, and test-taking skills. Includes a basic review of content related to the examinations.

Corequisite: Respiratory Clinical 4 10515182

## **Respiratory/Cardiac Physiology**

10515174 ......3 credits

Provides the student with an in-depth knowledge of the structure and function of the respiratory and circulatory systems necessary to function as a competent Respiratory Therapist. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care.

Prerequisites: General Anatomy & Physiology 10806177, Respiratory Survey 10515111, and Respiratory Therapeutics 1 10515171

## Respiratory/Cardio Diagnostics

10515181 .....3 credits

Advanced invasive and noninvasive diagnostic cardiopulmonary procedures including pulmonary function, hemodynamics and rescue medicine. Emphasis is placed on promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care.

Prerequisite: Respiratory Clinical 3 10515179

## Speech 🗹

10801198 .....3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.



# SALES SPECIALIST

Technical Diploma
Program Code: 30-104-7
Total Credits: 18

The Sales Specialist program prepares students for success through a curriculum that provides fundamental knowledge of marketing and sales. Students develop communication skills, problem-solving abilities, and a professional polish, while learning how to sell goods and services using a consultative approach—abilities that are highly valued by organizations seeking to employ sales professionals. Mid-State's Sales Specialist program prepares individuals through hands-on sales practice and salesperson/client role-play activities. Includes a focus on digital sales communication in the social media realm, preparing you to communicate effectively with clients, prepare and deliver sales-related presentations, and recommend the most appropriate solutions for your client.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

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This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

With:\_\_\_

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- ☐ Other:\_\_\_\_\_

\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





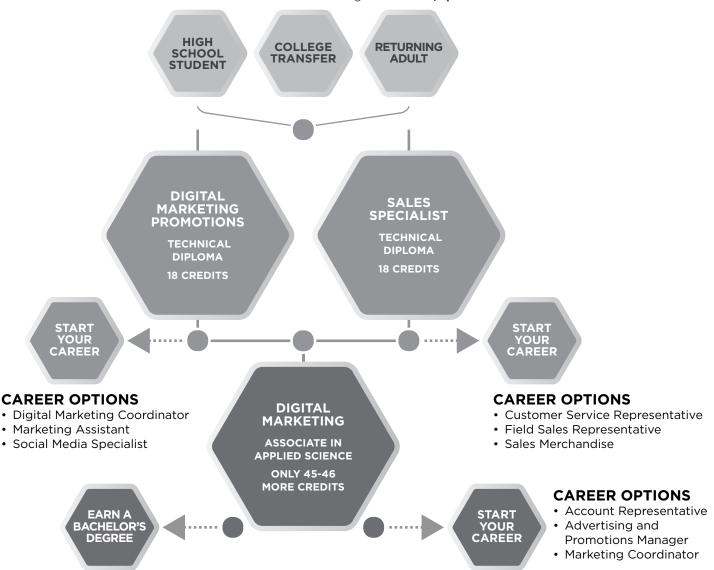
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1001 Centerpoint Drive 500 32nd Street North Stevens Point, WI 54481 Wisconsin Rapids, WI 54494

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **BACHELOR'S DEGREE OPTIONS**

Bellevue University, Colorado State University Global, Concordia University, Franklin University, Grand Canyon University (GCU), Herzing University, Indiana Wesleyan University, Lakeland University, Milwaukee School of Engineering (MSOE), Mount Mary University (MMU), University of Phoenix, UW-Green Bay, UW-Stevens Point, UW-Stevens Point at Marshfield, UW-Stout, UW-Whitewater, and Wisconsin Private-Nonprofit Universities/Colleges.

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Sales Specialist graduate, to be able to:

- · Develop marketing strategies.
- · Develop selling strategies.
- Deliver sales presentations.
- · Apply customer relationship building strategies.
- · Analyze sales information.
- · Prepare selling strategies.
- Promote products, services, images and/or ideas to achieve a desired result.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students will complete performance-based assessments in the Professional Selling course to fulfill the TSA requirement.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success 🗷

and is a graduation requirement.

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10104102 10801136 10801198	Marketing Principles & English Composition 1 & Speech &	<b>9 credits</b> 3 3 3
<b>Term</b> 10104105 10104107 10104121	Professional Selling & Social Media Marketing Fundamentals of Marketing Communications &	<b>9 credits</b> 3 3

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## **COURSE DESCRIPTIONS**

**Total credits 18** 

## English Composition 1

10801136 .....3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: High School GPA of 3.0 or Accuplacer Writing of 262 or ACT of 20 or Intro to College Writing 10-831-103 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements. Proficiency in word processing skills recommended.

# Fundamentals of Marketing Communications 10104121.....3 credits

This course prepares the learner to create and manage a wide range of internal and external organizational communications. Learners will be instructed on the interpersonal communication techniques required for success as a marketing professional. Topics will include preparing professionally written content, effectively using verbal and non-verbal communication in a business setting, developing a professional appearance and polish, presentation techniques for the creation and delivery of complex marketing materials, writing press releases, managing crises, and speaking with the media.

## Marketing Principles

This course serves as an introduction to the fundamental marketing concepts used to apply marketing strategies to product development, distribution, pricing, and promotion of goods and services.

## **Professional Selling**

10104105.....3 credits

Students develop the kind of sales techniques that encourage customers to believe in the integrity of the salesperson and the product. Subjects include handling customers' tangible and intangible needs, attitude conversion, sales strategies for a variety of conditions, and the changing form of selling techniques. Focuses on the need for a sales personality and the importance of psychology and creativity in selling.

## Social Media Marketing

10104107 .....3 credits

Addresses how social media has transformed marketing communications from traditional mass media to individualized marketing. Using a variety of social media tools and platforms, this class explores the different methodologies for social media marketing. Topics include creating social media, integrating social media as part of a marketing campaign, the concept of viral marketing, measuring social media success through analytics, and how organizations and individuals have successfully applied this form of marketing.

## Speech

10801198 ......3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. Bring transcripts for further evaluation if they do not meet these requirements. Prerequisite: High School GPA of 3.0 or Accuplacer Reading of 253, Writing of 262, or ACT of 21 Reading/19 Writing, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.



# STAINLESS STEEL WELDING

**Technical Diploma** 

Program Code: 30-442-7

**Total Credits: 6** 

Mid-State's Stainless Steel Welding program prepares students for entry-level employment as a stainless steel welder in production, construction, manufacturing, and servicing industries. Experienced instructors will teach you basic TIG (tungsten inert gas) welding of stainless steel as well as fabrication, print reading, and more. Instruction will combine lecture with hands-on practice, giving you the confidence you need to start your career in this rewarding field.

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

### **CHECKLIST:**

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where:

When:\_\_\_\_\_

With:\_\_\_\_\_\_

☐ Official Transcripts

- Mid-State Technical College Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- □ Other:\_\_\_\_

mstc.edu 888.575.6782 TTY: 711





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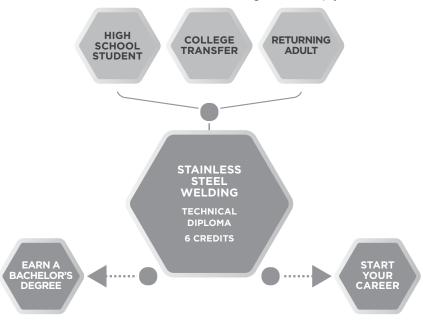
1001 Centerpoint Drive 500 32nd Street North Stevens Point, WI 54481 Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Industrial Mechanical Technician
- Precision Machining Technician
- Manufacturing Operations Management
- · Welding

# APPRENTICESHIP OPPORTUNITIES

• Ironworker Apprenticeship

## **CAREER OPTIONS**

- · Production Line Welder
- Stainless Steel Welder
- TIG Welder
- Apprenticeship

## **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Stainless Steel Welding graduate, to be able to:

- Demonstrate industry-recognized safety practices.
- · Interpret welding drawings.
- Produce gas tungsten arc welds (GTAW).

#### PROTECTIVE CLOTHING

Students are required to provide their own protective clothing and equipment. Details of the requirements and where they may be purchased are provided by the program instructor at the beginning of each semester.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

#### SAMPLE FULL-TIME CURRICULUM OPTION

 Term
 6 credits

 30442104
 Basic TIG (Stainless)
 2

 30442105
 Intermediate TIG (Stainless)
 2

 30442106
 Advanced TIG (Stainless)
 2

**Total credits 6** 

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/schedule.

## **COURSE DESCRIPTIONS**

## **Advanced TIG (Stainless)**

30442106 ......2 credits

Students learn advanced GTAW processes through the completion of stainless steel pipe weldments in the 5G and 6G positions.

Corequisite: Intermediate TIG (Stainless) 10442105.

## **Basic TIG (Stainless)**

30442104 ......2 credits

An introduction to the gas tungsten arc welding (GTAW) process commonly known as TIG. Topics include study and application of necessary safety and care of equipment and supplies. The student develops skills with the common production welding joints and materials all completed on stainless steel.

#### Intermediate TIG (Stainless)

30442105.....2 credits

Intermediate GTAW weldments created in the horizontal and vertical positions on stainless steel. Pulsed current is applied to stainless steel weldments. Complete penetration groove welds in stainless steel are practiced and evaluated. *Corequisite: Basic TIG (Stainless) 10442104.* 



# SURGICAL TECHNOLOGIST

**Technical Diploma** 

Program Code: 31-512-1

**Total Credits: 36-38** 

The Surgical Technologist program at Mid-State prepares graduates to work as part of the surgical team in operating rooms, providing instruments and supplies to the surgeon. Students learn skills and techniques used in central service with instrument processing. Training encompasses both classroom and lab instruction. You will gain clinical hands-on experience in surgery, ambulatory centers, central service, and other related areas. After successful completion of the program and certification exam, you will be a Certified Surgical Technologist (CST).

Estimated tuition and fees: mstc.edu/programcosts

#### **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

#### CHECKLIST:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)

Form(s): \_\_\_\_\_

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:\_\_\_

With:

- Official Transcripts
   Mid-State Technical College
   Student Services Assistant
   1001 Centerpoint Drive
   Stevens Point, WI 54481
- Criminal Background Statement of Understanding and Release of Information Form
- Other:

mstc.edu 888.575.6782 TTY: 711





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1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS

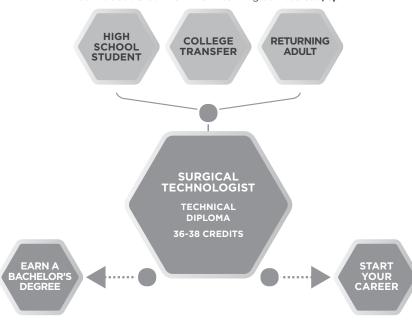
500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Central Service Technician
- Health & Wellness Promotion
- Health Information Management
- Medical Assistant
- Medical Coder
- Nursing
- Nursing Assistant
- Pharmacy Services Management
- Pharmacy Technician
- Phlebotomy Technician
- Respiratory Therapy

## **CAREER OPTIONS**

- Surgical Technologist
- Vascular/Cath Lab Surgical Technologist

## **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Surgical Technologist graduate, to be able to:

- Apply health care and technological science principles to the perioperative environment.
- Maintain principles of sterile technique in the surgical environment.
- Provide a safe, efficient, and supportive environment for the patient.
- Prepare the patient, operating room, and surgical team for the preoperative phase.
- Perform intraoperative case management in the scrub role.
- Perform postoperative case management.
- Function as an ethical, legal, and professional member of the health care team as determined by governing bodies.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students who successfully complete the final evaluation in ST: Clinical 3 will meet the TSA requirement.

The Mid-State Technical College Surgical Technologist program is accredited by the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA), under the auspices of:

#### Commission on Accreditation of Allied Health Education Programs

9355 113th St. N, #7709 Seminole, FL 33775 727.210.2350 • www.caahep.org

## **ENTRY CRITERIA**

To apply to the Surgical Technologist program, please submit the following documents to Mid-State Admissions:

- 1. Complete a Mid-State Application form and return it with a \$30 non-refundable application fee.
- 2. Submit the Criminal Background Statement of Understanding and Release of Information form found at mstc.edu/programs/surgical-technologist (available after completion of program application).
- Submit the Technical Standards Form found at mstc.edu/ programs/surgical-technologist.
- 4. Meet with an advisor for your New Student Advising Appointment.
- Complete Accuplacer or ACT if requirements not met via high school grade point average.

Mid-State Technical College • Admissions 500 32nd Street North, Wisconsin Rapids, WI 54494

## For placement on list to begin core Surgical Technologist Program courses (515-level classes):

- Complete Medical Terminology with final grade of "C" or better.
- Complete General Anatomy & Physiology with a final grade of "C" or better.
- Verify completion of the above with assigned academic advisor.

#### **TECHNICAL STANDARDS**

A list of specific physical, emotional, and mental tasks needed to function as a surgical technologist is available at **mstc.edu/programs/surgical-technologist**. Contact the Disability Services coordinator in the Student Services & Information Center to receive assistance.

#### **CLINICAL-RELATED REQUIREMENTS**

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.

#### PROGRAM PROGRESSION AND COMPLETION

In order to maintain a passing status and progress in the program, students must:

- Repeat courses not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of "C" or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability in courses. Students may be required to apply for program re-entry in order to repeat courses within the program's instructional area.

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success ☑

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 .....3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## Pre-Algebra

10834109 .....3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## SAMPLE FULL-TIME CURRICULUM OPTION

<b>Term</b> 10501101 10806177	<b>7</b> Medical Terminology <b>♂</b> General Anatomy & Physiology <b>♂</b>	credits 3 4
<b>Term</b> 31512327 31512328 31512329 31512330 10806197	ST: Introduction to Surgical Technology ST: Fundamentals 1 ST: Fundamentals 2 ST: Clinical 1 Microbiology 🗹	credits
31806311	-or- Applied Microbiology	2
<b>Term</b> 10501104 31512331 31512332 31512334	Culture of Healthcare ST: Surgical Procedures ST: Clinical 2 ST: Clinical 3	2 4 4 4
	Total credits	s 36-38

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 10501101 10806177	Medical Terminology & General Anatomy & Physiology &	<b>7 credits</b> 3 4
Term	4	-6 credits
10806197	Microbiology 🕝	4
31806311	Applied Microbiology	2
10501104	Culture of Healthcare	2
<b>Term</b> 31512327 31512328 31512329 31512330	ST: Introduction to Surgical Technolo ST: Fundamentals 1 ST: Fundamentals 2	13 credits  pgy 4 4 2 3
Term		12 credits
31512331	ST: Surgical Procedures	4
31512332		4
31512334	ST: Clinical 3	4
	Total cree	dits 36-38

## **Applied Microbiology**

## 31806311.....2 credits

Directs the learner's understanding of aseptic techniques, antimicrobial methods, specimen collection, preparation of cultures, body defenses against microorganisms, the infectious process, and the transmission of disease-causing organisms. Students learn such techniques as standard and transmission-based precautions, sanitization, disinfection, sterilization, preparation of cultures, and microscopic slide preparations with simple staining and gram staining.

## **Culture of Healthcare**

10501104.....2 credits

An introduction to the culture of healthcare for students interested in working in various healthcare settings. Learners examine professionalism, interpersonal and written communication skills, problem-solving skills and patient privacy and confidentiality issues as they relate to healthcare.

# General Anatomy & Physiology & 10806177.......4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: High School GPA of 3.0 or Accuplacer Reading Skills of 236 or ACT of 15, or General Chemistry 10806134 with a grade of "C" or better, or General Biology 10806114 with a grade of "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

#### **Medical Terminology I**

10501101...... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Learners practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

#### Microbiology &

10806197...... 4 credits

Examines microbial structure, metabolism, genetics, growth, and the relationship between humans and microorganisms. Disease production, epidemiology, host defense mechanisms, and the medical impact of microbes in the environment, industry, and biotechnology are also addressed. Prerequisite: General Anatomy & Physiology 10806177 with a "C" or better, or General Biology 10806114 with a "C" or better, or Plant Biology 10806184 with a grade of "C" or better

#### ST: Clinical 1

31512330 ......3 credits

Applies basic surgical theories, principles, and procedural techniques in the operating room. Students begin to function as team members under the guidance of the instructor and authorized clinical personnel. Surgical rotation case requirements are documented.

Prerequisites: Introduction to Surgical Technology 31512327, Fundamentals 1 31512328, and CPR certification

#### ST: Clinical 2

31512332...... 4 credits

Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures. Surgical rotation case requirements are documented.

Prerequisites: ST: Clinical 1 31512330, ST: Fundamentals 2 31512329, and Applied Microbiology 31806311; Corequisite: ST: Surgical Procedures 31512331

## ST: Clinical 3

31512334 ...... 4 credits

Enhances the student's technical experience and employee skills. Serves as a transition between student and employee. Applies advanced skills for the entry-level surgical technologist in the clinical setting. Surgical rotation case requirements are documented.

Prerequisite: ST: Clinical 2 31512332; Corequisite: ST: Surgical Procedures 31512331

## ST: Fundamentals 1

31512328 ...... 4 credits

Includes the basic clinical skills needed by the surgical technologist in the scrub role. Learners develop skills in disinfection, sterilization, identifying basic instrumentation, supplies, drains, catheters, dressings and sponges. Includes practice experience in creating a sterile field, draping, passing instruments and supplies, performing counts, and preparing supplies.

Prerequisites: Admission to Surgical Technologist program 315121, Medical Terminology 10501101, and General Anatomy & Physiology 10806177

## ST: Fundamentals 2

31512329 ......2 credits

Builds upon and reinforces the role of the surgical technologist as a member of the operating room team. Discusses care of the patient before, during, and after surgery with emphasis on surgical wounds, wound closure materials, and vital signs. Includes lecture and lab experiences. Prerequisites: ST: Introduction to Surgical Technology 31512327 and ST: Fundamentals 1 31512328

# ST: Introduction to Surgical Technology 31512327...... 4 credits

Provides the foundational knowledge of infection control and asepsis. Legal and ethical issues encountered in the healthcare environment are explored. Simulated laboratory practice enables the learner to develop beginning technical skills. Prerequisites: Admission to Surgical Technologist program 315121, Medical Terminology 10501101, and General Anatomy & Physiology 10806177

## ST: Surgical Procedures

31512331 ...... 4 credits

Provides the foundational knowledge of surgical core and specialty procedures. Examines the pathophysiology diagnostic interventions, and surgical interventions for a variety of surgical procedures. Incorporates integration of basic health sciences and technical knowledge to complete a plan of action for a surgical procedure.

Prerequisites: ST: Fundamentals 2 31512329, Clinical 1 31512330, and Applied Microbiology 31806311



# WELDING

Technical Diploma
Program Code: 31-442-1

**Total Credits: 29-30** 

The Welding program at Mid-State prepares graduates for a wide variety of welding jobs in production, maintenance, construction, manufacturing, and servicing industries. You will receive hands-on instruction and practice in a number of welding processes, including shielded metal arc, gas tungsten arc, gas metal arc, submerged arc, oxyacetylene cutting, plasma arc, and arc-air cutting. You will also become familiar with various types of metals, fabrication of metals, and welding under industry codes. Successful completion of this program prepares you to take welding certification tests.

Mid-State's Welding program courses prepare students for numerous state and national certifications. None is required to complete the program; there are additional costs for testing/certification. The College does not guarantee its curriculum matches the requirements for preparation, examinations, or licensure for other states.

Estimated tuition and fees: mstc.edu/programcosts

## **ACADEMIC ADVISOR**

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising**.

#### **CHECKLIST:**

With:

This section will be completed when meeting with your academic advisor.

- ☐ FAFSA (www.fafsa.gov)
- ☐ Financial Aid Form(s)
  Form(s):

☐ Follow-Up Appointment:

Where: \_\_\_\_\_

When:

Official Transcripts
 Mid-State Technical College

- Student Services Assistant 1001 Centerpoint Drive Stevens Point, WI 54481
- □ Other:

mstc.edu 888.575.6782 TTY: 711



MID-STATE
TECHNICAL COLLEGE

ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449 STEVENS POINT CAMPUS 1001 Centerpoint Drive

1001 Centerpoint Drive Stevens Point, WI 54481 WISCONSIN RAPIDS CAMPUS 500 32nd Street North

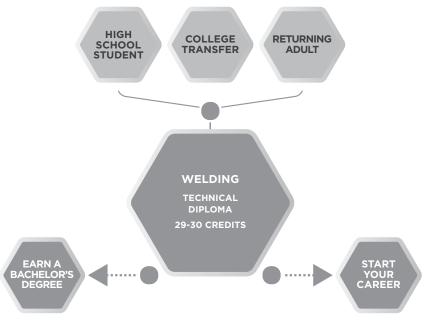
500 32nd Street North Wisconsin Rapids, WI 54494

## **CAREER PATHWAY**

# BEGIN AT ANY POINT IN THE PATHWAY

College Credit • Dual Credit
Military Experience • Work Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



## **OTHER OPTIONS**

#### **RELATED PROGRAMS**

- Industrial Mechanical Technician
- Precision Machining Technician
- Manufacturing Operations Management
- · Stainless Steel Welding

# APPRENTICESHIP OPPORTUNITIES

• Ironworker Apprenticeship

## **CAREER OPTIONS**

- · Construction Welder
- Fabricator Maintenance Welder
- · Production Line Welder
- Apprenticeship

## **BACHELOR'S DEGREE OPTIONS**

For more information and additional opportunities, visit mstc.edu/transfer.

#### **PROGRAM OUTCOMES**

Employers will expect you, as a Welding graduate, to be able to:

- Demonstrate industry-recognized safety practices.
- Interpret welding drawings.
- Produce shielded metal arc welds (SMAW).
- Produce gas metal arc welds (GMAW).
- · Produce flux core welds.
- Produce gas tungsten arc welds (GTAW).
- Perform cutting operations.

#### **TECHNICAL SKILLS ATTAINMENT**

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Students are notified of TSA reporting in their final few courses of the program.

#### PROTECTIVE CLOTHING

Students are required to provide their own protective clothing and equipment including welding gloves, jacket, and helmet. Details of the requirements and where they may be purchased are provided by the program instructor at the beginning of each semester.

NOTES:			

#### STUDENT HANDBOOK

Visit **mstc.edu/studenthandbook** to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

#### **GRADUATION REQUIREMENT**

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

## GPS for Student Success &

10890102 .....1 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course must be completed prior to obtaining 12 credits and is a graduation requirement.

#### **ADDITIONAL COURSES AS NEEDED**

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

## Intro to College Reading

10838104 ......2 credits

Provides learners with the opportunities to develop and expand reading skills, including comprehension and vocabulary skills. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

## Intro to College Writing

10831103 ......3 credits

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. The purpose of this course is to prepare students for successful entry into required program courses. This course is tuition bearing and under certain circumstances may qualify for financial aid. This course cannot be used to satisfy program completion requirements at Mid-State.

Prerequisite: Accuplacer Sentence Skills score of 60 or equivalent. Proficiency in word processing skills recommended.

## **Pre-Algebra**

10834109 ......3 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

Prerequisite: Accuplacer Math score of 65, Accuplacer Algebra score of 30, ABE Math Prep V 76854785 and ABE Math Prep VI 76854786 with a grade of "S." (Note: ABE Math Prep V and VI courses cannot be used to satisfy program completion requirements at Mid-State.)

## **SAMPLE FULL-TIME CURRICULUM OPTION**

Term	14-15 credi	ts
10804107	College Mathematics 🗷	3
	-or-	
32420320	Math for Manufacturing	2
31442313	Gas Metal Arc Welding: Introduction	3
31442314	Gas Tungsten Arc Welding: Introduction -or-	
30442104	Basic TIG (Stainless)	2
31442315	Inspections and Testing in Welding	1
31442317	Print Reading for Welding	1
31442319	Shielded Metal Arc Welding: Introduction	2
31442320	Welding Foundations 1	1
31442321	Welding Foundations 2	1
31462318	Safety for Industrial Trades 🗹	1
Term	15 credi	te
10442102	Intermediate GTAW (TIG) -or-	
30442105	Intermediate TIG (Stainless)	2
10442103	Advanced GTAW (TIG) -or-	_
30442106	Advanced TIG (Stainless) -or-	
10442115	Welding Fabrication Techniques	2
10442111	Intermediate GMAW/FCAW	3
31442316	Metallurgy for Welding	1
10457119	Fabrication Fundamentals 1	1
10457120	Fabrication Fundamentals 2	1
10623106	Intro to AutoCAD	1
31462302	Machine Shop Foundations	2
31442311	Weld Testing for GMAW & FCAW	1
31442412	Weld Testing for SMAW & GTAW	1
	Total credits 29-3	80

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

#### Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to **mstc.edu/schedule**.

## SAMPLE PART-TIME CURRICULUM OPTION

<b>Term</b> 31442313 31442314 30442104 31442320 31442321 31462318	Gas Metal Arc Welding: Introduction Gas Tungsten Arc Welding: Introduction Basic TIG (Stainless) Welding Foundations 1 Welding Foundations 2 Safety for Industrial Trades   **Trades **	3 -or- 2 1 1 1
<b>Term</b> 10442111 10623106 31442317 31442319	Intermediate GMAW/FCAW Intro to AutoCAD Print Reading for Welding Shielded Metal Arc Welding: Introduction	3 1 1 n 2
<b>Term</b> 10442102 30442105 31442316 31442315 10804107 32420320 31442311	Intermediate GTAW (TIG) -or- Intermediate TIG (Stainless) Metallurgy for Welding Inspections and Testing in Welding College Mathematics  -or- Math for Manufacturing Weld Testing for GMAW & FCAW	2 1 1 3 2 1
<b>Term</b> 10442103 30442106 10442115 10457119 10457120 31442412 31462302	Advanced GTAW (TIG) & -or- Advanced TIG (Stainless) -or- Welding Fabrication Techniques Fabrication Fundamentals 1 Fabrication Fundamentals 2 Weld Testing for SMAW & GTAW Machine Shop Foundations	2 1 1 1 2 29-30

## Advanced GTAW (TIG)

10442103 .....2 credits

Students learn complete penetration stainless steel pipe welds in the 5G and 6G positions.

Corequisite: Intermediate GTAW (TIG) 10442102

## Advanced TIG (Stainless)

30442106 ......2 credits

Students learn advanced GTAW processes through the completion of stainless steel pipe weldments in the 5G and 6G positions.

Corequisite: Intermediate TIG (Stainless) 30442105

#### **Basic TIG (Stainless)**

30442104 ......2 credits

An introduction to the gas tungsten arc welding (GTAW) process commonly known as TIG. Topics include study and application of necessary safety and care of equipment and supplies. The student develops skills with the common production welding joints and materials all completed on stainless steel.

## College Mathematics &

10804107 .....3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables. finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: High School GPA of 3.0 or Accuplacer Arithmetic of 250 and QAS 234 or ACT of 17 or Pre-Algebra 834109 with a grade of "C" or better or equivalent. Students are encouraged to bring transcripts for further evaluation if they do not meet these requirements.

## Gas Metal Arc Welding: Introduction

31442313 ......3 credits

In this course, you develop skills of welding on steel sheet metals and plates using the GMAW process. Emphasis is placed on axial spray, pulse spray, and short circuit mode of transfer. Upon completion of this course, the student is able to weld in several positions, read basic weld symbols, and have an understanding of written welding procedures.

# Gas Tungsten Welding: Introduction 31442314......2 credits

An introduction to the gas tungsten arc welding (GTAW) process commonly known as TIG, including the necessary safety and care of equipment and supplies. The student develops skills with the common production welding joints and materials.

## **Fabrication Fundamentals 1**

10457119.....1 credit

An introduction to structural shapes and sheet metal fabrication. Presents fabrication techniques, metal selection, and layout, cutting, bending, drilling, threading, and joining using manual equipment and techniques. Information is presented to the student and followed up with lab activities to provide a hands-on experience. Emphasizes developing an understanding of the tools, techniques, safe work habits, and application of sheet metal fabrication skills.

## **Fabrication Fundamentals 2**

10457120.....1 credit

An introduction to plate steel and heavy fabrication. Presents fabrication techniques using heavy fabrication equipment. CNC Cutting, Plate and Tube bending, Sawing and Shearing equipment will be presented and followed up with lab activities to provide a hands-on experience. Emphasizes developing an understanding of the equipment, techniques, safe work habits, and application of heavy metal fabrication skills.

## Intermediate GMAW/FCAW

10442111 .....3 credits

Builds skills with the GMAW process and performing welds on stainless steel and aluminum sheet metal and plate. Students are able to differentiate and select proper electrodes and shielding gases, and properly adjust parameters. Emphasizes axial spray, pulse spray, and short circuit mode of transfer depending on base metal. Students learn about and practice the FCAW process, including types of electrodes, fluxes, and shielding gases used in these processes. Students are able to weld in several positions, read some basic weld symbols, and have a basic understanding of written welding procedures. *Prerequisite: Gas Metal Arc Welding: Introduction 31442313* 

## Intermediate GTAW (TIG)

10442102 .....2 credits

In this course students weld in the horizontal and vertical positions on stainless steel and aluminum. Pulsed current is applied to stainless steel weldments. Complete penetration groove welds in stainless steel are practiced and evaluated. Corequisite: Gas Tungsten Arc Welding: Introduction 31442314

## Intermediate TIG (Stainless)

30442105.....2 credits

Intermediate GTAW weldments created in the horizontal and vertical positions on stainless steel. Pulsed current is applied to stainless steel weldments. Complete penetration groove welds in stainless steel are practiced and evaluated. *Corequisite: Basic TIG (Stainless) 30442104.* 

## Intro to AutoCAD

10623106 .....1 credit

Learners will develop practical approaches to constructing basic 2D drawings in AutoCAD software by drawing, modifying, and assigning appropriate layer properties.

Learners will also analyze length and area of shapes drawn in AutoCAD, summarize details through dimensions and annotations added to the drawings, and format the drawings for printing. Prior experience with computers is recommended.

## **Machine Shop Foundations**

32462302 .....2 credits

Students participating in this class will be introduced to common machine tools and their functions. Classroom activities and hands-on lab exercises will be used to introduce participants to some of the most common applications in machining. Lab activities will introduce students to shop safety and identification of machine tools. Students will also gain understanding of the basic processes performed with different machine tools and basic machine set up and operations.

## Math for Manufacturing

32420320 .....2 credits

Studies Welding and Fabrication problems involving calculations with fractions, decimals, percentages, measurements and conversions. Includes work with the metric system, measurement conversion, shapes, formulas for circumference area and volume and use of a scientific calculator. Formulas with application to bending metal are also studied.

Prerequisite: Admission into Precision Machining Technician program 314209, Welding program 314421, Gas Tungsten Arc Welding (Stainless Steel) 304427, or consent of instructor

## **Metallurgy for Welding**

31442316 ......1 credit

Investigates the effects of welding on the mechanical properties of metals. Learners explore hardness, strength, and weldability of various metals. Concepts are applied in various activities including heat treating, hardness testing, and tensile testing.

## **Print Reading for Welding**

31442317 ......1 credit

Students study print format, line types, orthographic views, dimensioning, welding symbols, and bill of materials. Students apply concepts by creating and fabricating from prints in individual and group activities.

## Safety for Industrial Trades &

31462318 ......1 credit

Provides an overview of safety, health, and environmental issues as they relate to industry. Various types of hazards and the controls and equipment used to reduce risks from hazards are discussed. Focuses on understanding the Occupational Safety and Health Administration (OSHA) and its function as well as other regulatory and enforcement agencies associated with industrial safety, health, and the environment.

## **Shielded Metal Arc Welding: Introduction** 31442315 ......2 credits

Begins to build the knowledge and skills of the SMAW process commonly known as stick welding. Students are able to weld in several positions, read some basic weld symbols, and have a basic understanding of written welding procedures.

## **Weld Inspections and Testing**

10442163.....1 credit

Emphasizes measurement of weld defects and assessment of weld quality conformance to common welding codes. Students conduct etch tests, bend tests, and break tests on welds. Visual inspection, dye penetrant testing, and magnetic particle testing are practiced.

## Weld Testing for GMAW & FCAW 31442311.....1 credit

Learners will execute weldments, in multiple positions. leading to bend tests for the GMAW and FCAW processes. Weldments will be certified and conducted to AWS (American Welding Society) standards, meeting requirements for Wisconsin Department of Safety and Professional Services certification. Upon successful completion of bend tests, learners will choose one process to submit for certification.

## Weld Testing for SMAW & GTAW 31442412.....1 credit

Learners will execute weldments, in multiple positions, leading to bend tests for the SMAW and GTAW processes. Weldments will be certified and conducted to AWS (American Welding Society) standards, meeting requirements for Wisconsin Department of Safety and Professional Services certification. Upon successful completion of bend tests, learners will choose one process to submit for certification.

## **Welding Fabrication Techniques**

10442115 .....2 credits

Students fabricate parts from prints and weld assemblies with a specified welding process. Cutting and forming may be required prior to assembly. Depending on the size and complexity of the project, students may be asked to work in a team to complete an assignment.

Prerequisites: Admission to Welding program 314421 and Intermediate GTAW (TIG) 10442102

## Welding Foundations 1

31442320 .....1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of FCAW, GMAW, and OXY-Fuel cutting. Classroom instruction paired with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.

## Welding Foundations 2

31442321.....1 credit

An introduction to fundamental welding techniques with an emphasis on safe work habits that covers the processes of GTAW, SMAW and Plasma cutting. Classroom instruction pared with lab activities are designed to provide fundamental skills in each of the welding processes covered in the class.