

# TECHNICAL STANDARDS

## Mechanical Design Technology

In this program grouping, students should be able to meet specific technical standards, which are the essential skills and abilities needed to be successful in a program, with or without reasonable accommodation. It is important to review and understand these standards before applying to the program. All Technical Standards documents are available for review on the Mid-State Technical College website. (Go to <https://www.mstc.edu/programs> and select the program.)

**This document should be reviewed prior to applying to the program.**

Reasonable accommodations for persons with disabilities will be made to ensure access to academic programs, activities, services, and employment in accordance with Section 504 and 508 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990, as amended. If accommodations are needed, contact the Disability Services coordinator at 888.575.6782, TTY 711, at least two weeks in advance of needed assistance. Services available are documented at <https://www.mstc.edu/student-services/disability-services>.

For more information, please see Mid-State Technical College's Equal Opportunity/Non-Discrimination Policy.

STANDARD	DEFINITION OF STANDARD	EXAMPLE(S) OF TECHNICAL STANDARD
Critical Thinking Skills	<ul style="list-style-type: none"><li>• Ability to measure, calculate, reason, analyze, synthesize, and integrate information.</li></ul>	<ul style="list-style-type: none"><li>• Apply knowledge and skills learned in the classroom to a work setting.</li><li>• Comprehend and follow instructions.</li><li>• Follow a process from start to finish, sequence information.</li><li>• Adapt decisions based on new information.</li><li>• Maintain focus in an environment with distractions.</li></ul>
Mobility/Motor Skills	<ul style="list-style-type: none"><li>• Possess sufficient motor function to set up and run manual and CNC machining equipment.</li><li>• Ability to stand on hard or concrete floors for prolonged periods of time.</li><li>• Ability to work with hands.</li><li>• Ability to complete duties requiring stooping and bending.</li></ul>	<ul style="list-style-type: none"><li>• Move in confined spaces including walking, squatting, and lifting while maintaining balance.</li><li>• Maintain balance in standing position.</li><li>• Move body from one side to the other.</li><li>• Reach below the waist and to the front or the side of the body to the level of the top of head (i.e., adjust overhead lights, plug electrical appliance into wall outlet).</li></ul>

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		<ul style="list-style-type: none"> <li>• Push, pull, stabilize, and freely move arms to allow movement of a part, tool, object from one place to another.</li> <li>• Bend, stretch, twist, reach with your body above shoulders, below waist, and in front.</li> </ul>
Tactile Skills	<ul style="list-style-type: none"> <li>• Ability to effectively use a computer, keyboard, and mouse.</li> <li>• Ability to physically inspect parts for issues and quality.</li> <li>• Ability to perform dexterous manipulative work.</li> <li>• Ability to feel by touch with finger dexterity.</li> </ul>	<ul style="list-style-type: none"> <li>• Grasp, twist, squeeze, pinch, and manipulate equipment.</li> </ul>
Auditory Skills	<ul style="list-style-type: none"> <li>• Ability to tolerate a wide range of noise which can potentially be loud.</li> <li>• Ability to effectively hear sounds that indicate potential issues and problems in the machining environment.</li> </ul>	<ul style="list-style-type: none"> <li>• Detect audible sounds for equipment function and warning.</li> </ul>
Visual Skills	<ul style="list-style-type: none"> <li>• Possess sufficient visual acuity to distinguish details from a distance and at a close proximity while wearing appropriate eye protection.</li> <li>• Possess sufficient enough vision to access printed and electronic documents as well as reading gauges.</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to visually detect equipment displays.</li> <li>• Ability to visually detect environmental hazards.</li> <li>• Detect objects, symbols and numbers both near and far.</li> <li>• Detect and identify different colors.</li> </ul>
Communication Skills	<ul style="list-style-type: none"> <li>• Ability to follow both written and verbal instructions.</li> <li>• Ability to have appropriate interpersonal interactions with other students, faculty, staff, facility owners, customers, and other technicians.</li> <li>• Ability to have effective written and verbal communication with others.</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to convey information in a clear, professional and timely manner.</li> <li>• Listen and respond to others in an accepting and respectful manner.</li> </ul>
Interpersonal Skills	<ul style="list-style-type: none"> <li>• Ability to work with others in a variety of settings and situations.</li> <li>• Ability to maintain hygiene and dress requirements appropriate for a machining environment.</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborate with others.</li> <li>• Establish a professional working relationship with coworkers, peers, instructors, and clients.</li> </ul>

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### Behavioral Skills

- Ability to behave in a safe, professional, and appropriate manner in both dress and actions, as required by the program.
- Ability to maintain a work pace that is appropriate and actively moving toward quality project completion.
- Wear personal protective equipment for safe practices (gloves, masks, eyewear).
- Tolerate heat and humidity.
- Adhere to safety/emergency protocols.
- Recognize and respond to hazardous conditions.
- Demonstrate impulse control and professional level of maturity.
- Follow emergency procedures as needed.
- Ability to problem-solve complex situations.
- Ability to accept constructive feedback.
- Prepared to work on time.

Mid-State does not discriminate on the basis of race, color, national origin, sex, disability, or age in its program, activity, or employment. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Vice President – Human Resources; 500 32nd Street North, Wisconsin Rapids, WI 54494; 715.422.5325 • AAEO@mstc.edu.