

# TECHNICAL STANDARDS

## Radiography

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 identify cause-effect relationships.</li><li>• Ability to plan/control activities for others.</li><li>• Ability to synthesize knowledge and skills.</li><li>• Ability to sequence information.</li><li>• Ability to make decisions independently.</li><li>• Ability to adapt decisions based on new information.</li><li>• Ability to transfer knowledge from one situation to another.</li><li>• Ability to process and interpret information from multiple sources.</li><li>• Ability to analyze and interpret abstract and concrete data.</li><li>• Ability to evaluate outcomes.</li><li>• Ability to problem solve.</li><li>• Ability to prioritize tasks.</li><li>• Ability to use long-term and short-term memory.</li></ul>	<ul style="list-style-type: none"><li>• Adapt decisions based on new information.</li><li>• Maintain focus in an environment with distractions.</li><li>• Demonstrate impulse control and professional level of maturity.</li><li>• Maintain appropriate boundaries in relationships with patients and peers.</li><li>• Maintain confidential information (Including by refraining from posting any confidential information on social media).</li><li>• Apply broad concepts to clinical situations.</li><li>• Concentrate to perform clinical tasks.</li><li>• Anticipate needs for procedures, patient, and respond appropriately.</li><li>• Prioritize care of patient.</li><li>• Be observant of contamination and know how to correct the situation.</li></ul>

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### Mobility/Motor Skills

- Ability to move within confined spaces.
  - Ability to maintain balance in multiple positions.
  - Ability to reach above shoulders (e.g., IV poles, x-ray tubes)
  - Ability to reach below waist (e.g., plug electrical appliance into wall outlet).
  - Ability to reach out front.
  - Ability to pick up objects with hands.
  - Ability to grasp small objects with hands (e.g., IV tubing, pencil).
  - Ability to write with a pen or pencil.
  - Ability to key/type (e.g., use a computer).
  - Ability to pinch/pick or otherwise work with fingers (e.g., manipulate a syringe).
  - Ability to twist (e.g., turn objects/knobs using hands).
  - Ability to stand (e.g., at client side during surgical or radiographic procedures).
  - Ability to sustain repetitive movements (e.g., CPR).
  - Ability to maintain physical tolerance (e.g., work on your feet a minimum of 8 hours).
  - Ability to push and pull 50 pounds (e.g., position client, move equipment).
  - Ability to support 50 pounds of weight (e.g., ambulate client).
  - Ability to lift 50 pounds (e.g., pick up a child, transfer a client, bend to lift an infant or child).
  - Ability to carry equipment/supplies.
  - Ability to squeeze with hands (e.g., operate a fire extinguisher).
  - Ability to twist, bend, stoop and squat.
  - Ability to move quickly (e.g., respond to an emergency).
  - Ability to climb stairs.
  - Ability to walk.
- Examples include the ability to grasp, twist, squeeze, pinch and manipulate equipment (i.e., ability to carry the cot).
  - Examples include the ability to move in confined spaces; maintain balance in standing position; move body from one side to the other; reach below the waist and to the front or the side of the body to the level of the top of head; and ability to push, pull, stabilize, and freely move arms to allow movement of an object or transfer subjects from one place to another.
  - Additional examples include the ability to squat or execute a modified squat (one knee on the floor); move quickly in case of emergency situations; climb and descend a flight of stairs.
  - Transfer, lift and carry patients from floor to cot and may include uneven surfaces.
  - Manipulate, assemble and move equipment.
  - Type on a computer, write with a pen.
  - Arm-hand steadiness.
  - Finger and manual dexterity (squeeze, grasp, twist, pinch, and manipulate small objects, e.g. sharps).
  - Demonstrate the ability to make precisely coordinated movements of the fingers to start IVs, manipulate or assemble instrument parts quickly with good hand-eye coordination.

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		<ul style="list-style-type: none"> <li>• Wear personal, protective equipment for safe practices (masks, eyewear, etc.).</li> <li>• Ability to respond to direction of the AED.</li> </ul>
Tactile Skills	<ul style="list-style-type: none"> <li>• Ability to feel vibrations (e.g., palpate pulses).</li> <li>• Ability to detect temperature (e.g., skin, solutions).</li> <li>• Ability to feel differences in surface characteristics (e.g., skin turgor, rashes).</li> <li>• Ability to feel sizes and shapes (e.g., palpate vein, identify body landmarks).</li> <li>• Ability to detect environmental temperature.</li> <li>• Ability to tolerate exposure to allergens (e.g., latex gloves, chemical substances).</li> <li>• Ability to tolerate strong soaps and odors.</li> <li>• Ability to detect odors (e.g., foul drainage, alcohol breath, smoke, gasses, noxious smells).</li> </ul>	<ul style="list-style-type: none"> <li>• Detect subtle changes or differences (e.g. pulse, temperature).</li> <li>• Tactile examples include ability to distinguish subtle vibrations through the skin (i.e., assess a pulse), identify the subtle difference in surface characteristics, and detect temperature (i.e., skin, liquids, environments).</li> <li>• Detect subtle differences through skin (depth of veins and arteries; vibrations, pulse, temperature).</li> <li>• Hold and operate equipment and IVs correctly.</li> </ul>
Auditory Skills	<ul style="list-style-type: none"> <li>• Ability to hear normal speaking-level sounds (e.g., person-to-person report).</li> <li>• Ability to hear faint voices.</li> <li>• Ability to hear faint body sounds (e.g., blood pressure sounds, assess placement of tubes).</li> <li>• Ability to hear in situations when not able to see lips (e.g., when masks are used).</li> <li>• Ability to hear auditory alarms (e.g., monitors, fire alarms, call bells).</li> </ul>	<ul style="list-style-type: none"> <li>• Identify lung sounds.</li> <li>• Auditory examples include ability to hear and understand voices in noisy environments, including traffic noise, busy places of business, sirens, etc.</li> </ul>
Visual Skills	<ul style="list-style-type: none"> <li>• Ability to see objects up to 20 inches away (e.g., information on computer screen, skin conditions).</li> <li>• Ability to see objects up to 20 feet away (e.g., client in room).</li> <li>• Ability to use depth perception.</li> <li>• Ability to use peripheral vision.</li> <li>• Ability to distinguish color and color intensity (e.g., color codes on supplies, flushed skin/paleness).</li> </ul>	<ul style="list-style-type: none"> <li>• Visually detect hazards.</li> <li>• See and detect warning signals on equipment displays.</li> <li>• Identify dangerous objects and situations within the environment.</li> <li>• Ability to see clearly, (both near and far), including peripheral vision and depth perception.</li> </ul>

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		<ul style="list-style-type: none"> <li>• Ability to identify labels and patient ID bands.</li> <li>• Observe patient while in care.</li> </ul>
Communication Skills	<ul style="list-style-type: none"> <li>• Ability to read and understand written documents and digital displays (e.g., charts, graphs).</li> <li>• Ability to teach (e.g., client/family about health care).</li> <li>• Ability to influence people.</li> <li>• Ability to direct/manage/delegate activities of others.</li> <li>• Ability to speak and write English.</li> <li>• Ability to listen/comprehend spoken/written word.</li> <li>• Ability to collaborate with others (e.g., health care workers, peers).</li> <li>• Ability to manage information.</li> </ul>	<ul style="list-style-type: none"> <li>• Speak, read, and write English.</li> <li>• Collaborate with others.</li> <li>• Respond to others in an accepting and respectful manner.</li> <li>• Ability to interact and support people during times of stress and emotional upset.</li> <li>• Ability to cope with strong emotions and physical outbursts of people while remaining in a reasonable state of calm.</li> <li>• Ability to focus attention on a person's needs despite interruptions and multiple demands.</li> <li>• Ability to interact as a team member.</li> <li>• Ability to show respect for diversity in culture, religion, sexual orientation, marital status, socioeconomic status and abilities/disabilities.</li> <li>• Prepare written and verbal reports regarding patient care.</li> <li>• Ability to convey information in a clear, professional and timely manner.</li> <li>• Identify patients.</li> <li>• Read, identify, and chart data as needed.</li> <li>• Follow proper protocol.</li> <li>• Work independently and in a team.</li> </ul>
Interpersonal Skills	<ul style="list-style-type: none"> <li>• Ability to establish rapport with individuals, families, and groups.</li> <li>• Ability to respect/value cultural differences in others.</li> </ul>	<ul style="list-style-type: none"> <li>• Exhibit positive interpersonal skills in all interactions.</li> <li>• Maintain confidentiality.</li> </ul>

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	<ul style="list-style-type: none"> <li>• Ability to negotiate interpersonal conflict.</li> <li>• Ability to establish professional relationships.</li> <li>• Ability to provide client with emotional support.</li> <li>• Ability to adapt to changing environment/stress.</li> <li>• Ability to deal with the unexpected (e.g., client condition, crisis).</li> <li>• Ability to focus attention on task.</li> <li>• Ability to cope with own emotions.</li> <li>• Ability to perform multiple responsibilities concurrently.</li> <li>• Ability to cope with strong emotions in others (e.g., grief).</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate ability to work as a team member.</li> <li>• Adhere to attendance, dress code, and personal hygiene policies or protocol.</li> <li>• Respond to challenging situations while maintaining composure and professionalism.</li> <li>• Avoid participating in gossip complaining and any other unprofessional communication.</li> <li>• Exhibit consistent and on-time attendance as scheduled.</li> <li>• Work cooperatively with intra and inter professional teams.</li> </ul>
Behavioral Skills	<ul style="list-style-type: none"> <li>• Ability use sound judgement to complete projects and tasks in an appropriate time frame.</li> <li>• Ability to learn and apply workplace responsibilities.</li> <li>• Ability to be attentive in the classroom, observe demonstrations, and participate in lab classes.</li> </ul>	<ul style="list-style-type: none"> <li>• Display integrity, honesty, respect, reliability and accountability.</li> <li>• Read and comprehend procedure manuals and policies.</li> <li>• Comply with legal and ethical standards.</li> </ul>

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