

# TECHNICAL STANDARDS

## Construction Trades | Heating, Ventilation, & Air Conditioning (HVAC) Installer

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 use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.</li><li>• Ability to be attentive in the classroom, observe demonstrations and participate in lab classes.</li><li>• Ability to recognize when there is a problem or possible problem.</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><li>• Follow emergency procedures as needed.</li><li>• Ability to problem solve complex situations.</li><li>• Read and interpret construction drawings, blueprints, and specifications accurately to understand project requirements and contribute effectively to construction activities.</li></ul>
Mobility/Motor Skills	<ul style="list-style-type: none"><li>• Possess physical strength, flexibility, and dexterity to safely perform HVAC services.</li></ul>	<ul style="list-style-type: none"><li>• Move in confined spaces including walking, squatting, and lifting while maintaining balance.</li></ul>

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		<ul style="list-style-type: none"> <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> <li>• Push, pull, stabilize, and freely move arms to allow movement of a part, tool, object from one place to another, and use tools overhead.</li> <li>• Bend, stretch, twist, reach with your body above shoulders, below waist, and in front.</li> <li>• Manipulate, assemble, and move equipment</li> <li>• Climb stairs, maintain balance on roofs and uneven surfaces.</li> </ul>
Tactile Skills	<ul style="list-style-type: none"> <li>• Ability to use sensory cues to maintain quality standards of brazing and other HVAC services.</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 distinguish between tones of various pitches.</li> </ul>	<ul style="list-style-type: none"> <li>• Detect audible sounds for function and warning of equipment.</li> <li>• Able to detect or differentiate sounds that vary over a broad range of pitch and loudness.</li> </ul>
Visual Skills	<ul style="list-style-type: none"> <li>• Ability to use peripheral vision and depth perception</li> <li>• Ability to view blueprints, sketches, schematic diagrams, and other printed documents including but not limited to tape measures, architect and engineer scales, meters, and testers.</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>

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		<ul style="list-style-type: none"><li>• Able to work in varied lighting environments.</li></ul>
Communication Skills	<ul style="list-style-type: none"><li>• Ability to communicate in class and on brazing floor using welding terms and safety practices.</li></ul>	<ul style="list-style-type: none"><li>• Effective communication skills for interacting with peers, clients, subcontractors, and other stakeholders in construction projects, both orally and in writing.</li></ul>
Interpersonal Skills	<ul style="list-style-type: none"><li>• Possess sufficient personal skills for successful interactions with customers, colleagues, supervisors, and from a variety of backgrounds.</li><li>• Ability to learn and apply workplace procedures.</li></ul>	<ul style="list-style-type: none"><li>• Establish a professional working relationship with the coworkers, peers, instructors, and clients.</li></ul>
Behavioral Skills	<ul style="list-style-type: none"><li>• Ability to work in an industrial environment.</li><li>• Ability to be aware of surroundings.</li><li>• Ability use sound judgement to complete projects and tasks in an appropriate time frame.</li></ul>	<ul style="list-style-type: none"><li>• Respond to challenging situations while maintaining composure and professionalism.</li><li>• Display integrity, honesty, respect, reliability and accountability.</li><li>• Demonstrate ability to accept constructive feedback.</li><li>• Demonstrate ability to accept responsibility for own actions.</li><li>• Capable of performing tasks in various weather conditions, encompassing heat, humidity, and below-zero temperatures.</li><li>• Wear appropriate PPE, such as hard hats, safety glasses, gloves, and steel-toe boots, to minimize the risk of injury.</li><li>• Adherence to safety regulations and protocols established by occupational safety organizations such as OSHA (Occupational Safety and Health Administration).</li></ul>

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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.