

The **Precision Machining** program technical standards have been developed to inform students of the nonacademic essential functions of the program and profession. Examples are not all inclusive.

Standard	Essential Function	Examples
<b>Communication Oral / Written</b>	<ul style="list-style-type: none"> <li>Skills sufficient to communicate information and ideas so others will understand</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>
<b>Mobility / Motor Skills</b>	<ul style="list-style-type: none"> <li>Motor skills sufficient to set up and run manual and CNC machining equipment</li> <li>Mobility sufficient to perform physical activities that require considerable use of arms and legs and moving the whole body</li> <li>Ability to stand on hard or concrete floors for prolonged periods of time</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>
<b>Physical Strength and Stamina</b>	<ul style="list-style-type: none"> <li>Ability to participate in an activity for long periods of time</li> <li>Ability sufficient to lift and carry at least 50 pounds</li> </ul>	<ul style="list-style-type: none"> <li>Participate in project-related activity for up to six continuous hours</li> <li>Lift and move building materials</li> </ul>
<b>Sensory</b> <ul style="list-style-type: none"> <li><b>Sight</b></li> <li><b>Sound</b></li> <li><b>Taste</b></li> <li><b>Touch</b></li> </ul>	<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> </ul>	<ul style="list-style-type: none"> <li>Ability to visually detect equipment displays</li> <li>Ability to visually detect environmental hazards</li> </ul>

Standard	Essential Function	Examples
<ul style="list-style-type: none"> <li>• <b>Smell</b></li> </ul>	<ul style="list-style-type: none"> <li>• Ability to access printed and electronic documents as well as reading gauges</li> <li>• Ability to tolerate loud noises</li> <li>• Ability to effectively hear sounds that indicate potential issues and problems in the machining environment.</li> <li>• Ability to effectively use a computer, keyboard/mouse, and a CNC controller</li> <li>• Ability to physically inspect parts for issues and quality</li> <li>• Ability to perform dexterous manipulative work</li> <li>• Ability to work with hands, being able to feel by touch, with finger dexterity</li> <li>• Ability to complete duties requiring stooping and bending.</li> </ul>	<ul style="list-style-type: none"> <li>• Detect objects, symbols, and numbers both near and far</li> <li>• Detect and identify different colors</li> <li>• Detect audible sounds for equipment function and warning</li> <li>• Grasp, twist, squeeze, pinch, and manipulate equipment</li> </ul>
<p><b>Environmental / Occupational Exposure</b></p>	<ul style="list-style-type: none"> <li>• Possible exposure to extreme noise levels</li> <li>• Possible exposure to extreme weather</li> <li>• Possible exposure to dust, chemicals, and fumes</li> </ul>	<ul style="list-style-type: none"> <li>• Tolerate heat and humidity</li> <li>• Recognize and respond to hazardous conditions</li> </ul>
<p><b>Field or Industry Professional Standards</b></p>	<ul style="list-style-type: none"> <li>• Safely operate tools and equipment</li> <li>• Ability to maintain hygiene and dress requirements appropriate for a machining environment</li> </ul>	<ul style="list-style-type: none"> <li>• Wear personal protective equipment for safe practices (gloves, masks, eyewear)</li> <li>• Recognize and respond to hazardous conditions</li> <li>• Demonstrate impulse control and professional level of maturity.</li> <li>• Follow emergency procedures as needed</li> </ul>

Standard	Essential Function	Examples
<ul style="list-style-type: none"> <li>• Taste</li> <li>• Touch</li> <li>• Smell</li> </ul>	<p>equipment, and operate a computer</p> <ul style="list-style-type: none"> <li>• Discern information from computers, electronic devices, patient charts and printed documents over extended periods</li> <li>• Listening skills sufficient to communicate with others</li> <li>• Identify various sounds</li> <li>• Ability to touch and locate anatomy on patients</li> <li>• Ability to tolerate various odors</li> </ul>	<ul style="list-style-type: none"> <li>• Differentiate between black, white, and shades of gray on a computer screen</li> <li>• Communicate in darkened radiographic rooms and operating rooms while wearing a surgical mask at distances up to 30 feet</li> <li>• Hear equipment/emergency alarms, call bell, or call for help</li> <li>• Listen to heart, lung, and blood pressure sounds</li> <li>• Feel for pulse</li> <li>• Perform radiographic examinations and physical assessments</li> <li>• Work with patients with poor hygiene</li> </ul>
<p><b>Environmental / Occupational Exposure</b></p>	<ul style="list-style-type: none"> <li>• Exposure to communicable and infectious diseases, secretions, blood, and bodily fluids</li> <li>• Exposure to environmental hazards</li> <li>• Exposure to X-ray radiation</li> <li>• Ability to work under high stress situations and respond promptly</li> </ul>	<ul style="list-style-type: none"> <li>• Possible exposure to HIV, hepatitis, etc.</li> <li>• Exposure to X-ray radiation, medicinal preparations, latex, and toxic substances</li> <li>• Respond appropriately in emergency to maintain patient safety and care</li> </ul>
<p><b>Field or Industry Professional Standards</b></p>	<ul style="list-style-type: none"> <li>• Criminal background check</li> <li>• CPR certification</li> <li>• Pass drug screening</li> </ul>	<ul style="list-style-type: none"> <li>• Perform CPR</li> <li>• Adhere to ARRT Standards of Ethics</li> </ul>

Standard	Essential Function	Examples
	<ul style="list-style-type: none"><li data-bbox="532 310 873 468">• Comply with American Registry of Radiologic Technologists (ARRT) Standards of Ethics</li></ul>	