



## Technical Standards

### COMMERCIAL and HEAVY CONSTRUCTION

#### Washburn Institute of Technology/Washburn Tech

The technical standards discussed in the following chart define performance expectations that must be met for successful advancement through and completion of the **Commercial and Heavy Construction Program**. It is the policy of Washburn Tech to provide reasonable accommodations for those with disabilities, health impairments, and other disabling conditions. These standards can also be used to determine whether accommodations or modifications are necessary. They have been established through consideration by faculty and consultation with the following sources: consultation with the advisory committee for the program, The Vocational Rehabilitation Act, The Americans with Disabilities Act, Dictionary of Occupational Titles, O\*Net Online developed for the U.S. Department of Labor.

ABILITY	STANDARD	Some examples of necessary activities (Not all inclusive)
<b>Physical Demands / Motor Skills</b>	<ul style="list-style-type: none"> <li>• Candidate/Student must have the ability to perform physical activities that require considerable use of your hands, arms and legs and moving your whole body. This will include Extent Flexibility, Finger Dexterity, Manual Dexterity, Arm-Hand Steadiness, Trunk Strength, coordination of movement of both hands simultaneously, and Control Precision.</li> <li>• Have the ability to use your abdominal and lower back muscles to support part of the body repeatedly or continuously over time without ‘giving out’ or fatiguing.</li> </ul>	<ul style="list-style-type: none"> <li>• Have the ability to bend, stretch, twist, or reach with your body, arms, and/or legs and doing such movements as climbing, lifting, balancing, walking, stooping, and handling of materials.</li> <li>• The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.</li> <li>• Have the ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions</li> <li>• Must have the ability to lift 50 lbs of weight.</li> <li>• Student must be able to walk on various terrains, climb on and off the equipment, sit for extended periods of time, work in confined spaces (trenches) and be able to operate equipment on various terrains and have the physical conditioning required for the roughness of operating the machinery on such terrains.</li> <li>• Must be able to operate several controls simultaneously using both hands.</li> </ul>
<b>Critical Thinking/ Sensory/ Observation/ Reasoning Skills</b>	Candidate/Student must: <ul style="list-style-type: none"> <li>• Be able to use logic and reasoning to identify the strengths and weaknesses of</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate problem solving skills.</li> <li>• Understand written sentences and paragraphs in work related documents.</li> </ul>

	<p>alternative solutions, conclusions or approaches to problems.</p> <ul style="list-style-type: none"> <li>• Make observations requiring the functional use of vision, hearing, and other sensory modalities.</li> <li>• Must be able to be attentive in the classroom, observe demonstrations and participate in lab classes.</li> <li>• Must have visual perception</li> <li>• Must be able to problem solve and diagnose including obtaining, interpreting and documenting data.</li> <li>• Must be able to recognize when there is a problem or possible problem.</li> <li>• Make themselves aware of their surroundings by using their senses.</li> <li>• Must be able to retain information from instruction and demonstration so that a series of required steps are completed in the proper order.</li> </ul>	<ul style="list-style-type: none"> <li>• Determine causes of operating errors and deciding what to do about it.</li> <li>• Combine pieces of information to form general rules or conclusions and to apply general rules to specific problems to produce answers that make sense.</li> <li>• Recognize abnormal mechanical sounds.</li> <li>• Recognize unusual smells such as motors and hydraulic pumps getting hot.</li> <li>• Seeing abnormal conditions occurring in machinery operation.</li> </ul>
<p><b>Behavioral / Social Skills and Professionalism</b></p>	<p>Candidate/Student:</p> <ul style="list-style-type: none"> <li>• Must have sufficient personal skills for successful interactions with customers, colleagues, supervisors, and from a variety of social, emotional, cultural, and intellectual backgrounds.</li> <li>• Must possess the emotional well-being required for use of their intellectual abilities, the exercise of sound judgment, the prompt completion of all responsibilities in the classroom and for lab projects.</li> <li>• Must be able to adapt to ever-changing environments, display flexibility, and learn to function in the face of uncertainties and stresses which are inherent in the educational process, as well as when dealing with clients, colleagues, and industry situations.</li> <li>• Must have the ability to develop organizational skills necessary to meet deadlines and manage time.</li> <li>• Student will be expected to learn and apply workplace responsibilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Have face-to-face discussions with individuals in work areas.</li> <li>• Have good personal hygiene, professional conduct and appearance.</li> <li>• Be willing to work with others building team skills.</li> <li>• Demonstrate attributes of empathy, integrity, concern for others, interpersonal skills, interest and motivation.</li> <li>• Maintain client confidentiality.</li> <li>• Be an honest and ethical worker. Be pleasant with others and display a good-natured, cooperative attitude. Be careful about detail and thoroughness in completing work tasks.</li> <li>• Maintain composure, keep emotions in check, control anger, and avoid aggressive behavior, even in very difficult situations</li> </ul>

<p><b>Communication Skills</b></p>	<ul style="list-style-type: none"> <li>• Candidate/Student:</li> <li>• Must be able to communicate not only in speech, but reading and writing in English.</li> <li>• Must be sensitive to multicultural and multilingual needs</li> <li>• Must be able to communicate through various methods such as hand signals and horns.</li> </ul>	<ul style="list-style-type: none"> <li>• Write legibly, a thought on paper on how an operation of training equipment occurred.</li> <li>• Read chapters in text and manuals and answer questions on the topics at hand.</li> <li>• Orally explain how you arrive at your completions on work stations.</li> <li>• English communication skills for necessary interaction with faculty, peers, customers, and others orally and in writing.</li> <li>• Equipment operators and workers use hand signals and horns to communicate while performing the job duties in the field.</li> </ul>
<p><b>Working Conditions</b></p>	<ul style="list-style-type: none"> <li>• Candidate/Student will be working with various pieces of heavy equipment and power tools.</li> <li>• Must have the ability to work in various environments.</li> <li>• Must meet work environment criteria at time of employment.</li> <li>• Must be able to work in a group environment around several pieces of equipment and personnel.</li> </ul> <p><b>NOTE:</b> At time of employment may be expected to have a resume, a valid Driver's License, pass a drug test, pass a background check, and documentation to legally work in the United States. Many jobs require a CDL which requires 21 years of age and proof of US Citizenship.</p>	<ul style="list-style-type: none"> <li>• Must be able to work around many various pieces of heavy equipment that produces excessive noise that requires hearing protection to be worn.</li> <li>• Must be able to work around diesel fuel fumes and various oils and greases used in the equipment.</li> <li>• Must be able to work in cold or hot conditions as well as dusty windy, conditions and wet conditions.</li> <li>• Must be willing to perform at work stations with Safety in mind and will build on safety habits.</li> <li>• Must be willing to work on jobsite conditions, which include dirt clods, windrows, slopes and other obstacles including outside in good and bad weather, etc.</li> </ul>

**PLEASE COMPLETE THIS FORM AND RETURN IT TO THE INSTRUCTOR.  
TECHNICAL STANDARDS FOR ENROLLMENT IN COMMERCIAL AND HEAVY  
CONSTRUCTION.**

Washburn Institute of Technology

**CHECK ALL THAT APPLY.**

- \_\_\_\_ I understand the expectations, as explained on the previous page, must be for advancement through and successful completion of the **Commercial and Heavy Construction** program.
- \_\_\_\_ Upon admission to the program, I received a copy of the Technical Standards and they have been explained to me.
- \_\_\_\_ I would like to discuss the Standards checked below.
- \_\_\_\_ A. Physical Demands / Motor Skills
- \_\_\_\_ B. Critical Thinking /Sensory/Observation / Reasoning Skills
- \_\_\_\_ C. Behavioral / Social Skills and Professionalism
- \_\_\_\_ D. Communication Skills
- \_\_\_\_ E. Working Conditions

**QUESTIONS OR COMMENTS:** (If additional information, attach another page.)

**SIGNATURE** \_\_\_\_\_ **DATE** \_\_\_\_\_

**PLEASE PRINT NAME** \_\_\_\_\_

### **Disability**

The Campus Advocate is responsible for assisting in arranging accommodations and for identifying resources at Washburn Tech for persons with disabilities. Qualified students with disabilities **MUST** register and provide documentation with the office to be eligible for services. New requests for accommodations should be submitted two months or more prior to the date services should begin; however, contact the Campus Advocate as soon as a need may arise. Depending on the accommodation request, four to eight-week lead time may be needed for timely and effective provision of services. The Campus Advocate coordinates and assists in arranging services it deems appropriate for eligible students on a case-by-case basis.

If you are a student with a disability that may substantially limit your ability to participate in this class and believe you will need accommodations, it is your responsibility to contact:

**The Campus Advocate**

Location: Building A, room 117C

Phone: 785-670-3364

E-Mail: [shelley.bearman@washburntech.edu](mailto:shelley.bearman@washburntech.edu)

### **Non-Discrimination**

Washburn University **prohibits discrimination** on the basis of race, color, religion, age, national origin, ancestry, disability, sex, sexual orientation, gender identity, genetic information, veteran status, or marital or parental status. The following person has been designated to handle inquiries regarding the non-discrimination policies: Dr. Pamela Foster, Equal Opportunity Director/Title IX Coordinator, Washburn University, 1700 SW College Ave, Topeka, Kansas 66621, 785.670.1509, [eodirector@washburn.edu](mailto:eodirector@washburn.edu).