

WASHBURN
UNIVERSITY
INSTITUTE OF TECHNOLOGY
Technical Standards

MACHINING & MANUFACTURING TECHNOLOGY (CERT A or CERT C)

The technical standards discussed in the following chart define performance expectations that must be met for advancement through and successful completion of the **Machining & Manufacturing Technology (CERT A or CERT C)**. 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 and 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)
Physical Demands / Motor Skills	<ul style="list-style-type: none"> 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, and Control Precision 	<ul style="list-style-type: none"> 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. The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects. Have the ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions Must have the ability to lift 50 lbs of weight. 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.
Critical Thinking/ Observation/ Sensory/ Reasoning Skills	<ul style="list-style-type: none"> Candidate/Student must be able to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems. Must be able to be attentive in the classroom, observe demonstrations and participate in lab classes. Must have visual perception Must be able to problem solve and diagnose including obtaining, 	<ul style="list-style-type: none"> Demonstrate problem solving skills. Knowledge of arithmetic, algebra, geometry, statistics, and their applications. Understanding written sentences and paragraphs in work related documents. Determining causes of operating errors and deciding what to do about it. These observations require the functional use of vision, hearing, and other sensory modalities. Combine pieces of information to form general rules or conclusions and to apply

	<p>interpreting and documenting data.</p> <ul style="list-style-type: none"> • Must be able to recognize when there is a problem or possible problem. • Make themselves aware of their surroundings by using their senses. • Must be able to work independently. • Must be able to retain information from instruction and demonstration so that a series of required steps are completed in the proper order. • Must be able to maintain focus while working on detailed projects. 	<p>general rules to specific problems to produce answers that make sense.</p> <ul style="list-style-type: none"> • Recognize abnormal mechanical sounds. • Unusual smells such as motors and transformers burning. • Seeing abnormal conditions occurring in machinery operation.
Behavioral / Social Skills and Professionalism	<ul style="list-style-type: none"> • Candidate/Student must have sufficient personal skills for successful interactions with customers, colleagues, supervisors, and from a variety of social, emotional, cultural, and intellectual backgrounds. • 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. • 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. • Must have the ability to develop organizational skills necessary to meet deadlines and manage time. • Student will be expected to learn and apply workplace responsibilities. 	<ul style="list-style-type: none"> • Have face-to-face discussions with individuals in work areas. Have good personal hygiene, professional conduct, and appearance. • Be willing to work with others building team skills. • Be able to critique classmates projects in a professional manner. • Teaching others how to do something. • Demonstrate attributes of empathy, integrity, concern for others, interpersonal skills, interest, and motivation. • Maintain client confidentiality. • 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. • Maintain composure, keep emotions in check, control anger, and avoid aggressive behavior, even in very difficult situations.

Communication Skills	<ul style="list-style-type: none"> • Candidate/Student must be able to communicate not only in speech but reading and writing in English. • Must be sensitive to multicultural and multilingual needs 	<ul style="list-style-type: none"> • Write legibly, a thought on paper on how an operation of training equipment occurred. • Read chapters in text and manuals and answer questions on the topics at hand. • Orally explain how you arrive at your completions on work stations. • English communication skills for necessary interaction with faculty, peers, customers, and others orally and in writing.
Working Conditions	<ul style="list-style-type: none"> • Must have the ability to work in various environments. • Must meet work environment criteria at time of employment. • At time of employment must have resume, a valid Driver's License, or other means of transportation, and may be expected to pass a drug test. 	<ul style="list-style-type: none"> • Job requires being careful about detail and thorough in completing work tasks. • Job requires being reliable, responsible, dependable, and fulfilling obligations. • Must be willing to perform at work stations with Safety in mind and will build on safety habits.

PLEASE COMPLETE THIS FORM AND RETURN IT TO THE INSTRUCTOR.
TECHNICAL STANDARDS FOR ENROLLMENT IN Machining & Manufacturing Technology
CERT A or CERT C.
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 **Machining & Manufacturing Technology 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 Assistant Director for Student Accommodations is responsible for assisting in arranging accommodations and identifying resources at Washburn Tech for individuals with disabilities. Qualified students with disabilities **MUST** register and provide medical documentation from a qualified licensed professional with the office to be eligible for services. New requests for accommodations should be submitted prior to the date services should begin ideally at the beginning of the semester; however, contact the Assistant Director for Student Accommodations as soon as a need may arise. The Assistant Director for Student Accommodations coordinates and assists in arranging services it deems appropriate for eligible students on a case-by-case basis related to accommodations within Washburn Tech.

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:

Washburn Student Accessibility Services

MK Hunt, Assistant Director

Location: Building A, Student Services North

Phone: 785-670-3364

E-Mail: mk.hunt@washburn.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: Michelle Godinet, Equal Opportunity Director/Title IX Coordinator, Washburn University, 1700 SW College Ave, Topeka, Kansas 66621, 785.670.1509, codirector@washburn.edu.