

## **Technical Standards**

# **AUTOMOTIVE TECHNOLOGY** (Certificate A and/or Certificate C)

The technical standards discussed in the following chart define performance expectations that must be met for advancement through and successful completion of the **Automotive Technology 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 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	Candidate/Student must have the ability to perform physical activities that require considerable use of your hands, arms, legs and moving your whole body.  Arm-Hand Steadiness  Manual Dexterity  Finger Dexterity  Control Precision  Multi-limb Coordination  Static Strength  Extent Flexibility  Reaction Time  Trunk Strength  Gross Body Coordination  Wrist-Finger Speed  Speed of Limb Movement  Dynamic Strength  Stamina  Lifting Strength	<ul> <li>The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.</li> <li>The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.</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>The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.</li> <li>The ability to coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion.</li> <li>The ability to exert maximum muscle force to lift, push, pull, or carry objects.</li> <li>The ability to bend, stretch, twist, or reach with your body, arms, and/or legs.</li> <li>The ability to quickly respond (with the hand, finger, or foot) to a signal (sound, light, picture) when it appears.</li> <li>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> <li>The ability to coordinate the movement of your arms, legs, and torso together when the</li> </ul>

#### whole body is in motion. The ability to make fast, simple, repeated movements of the fingers, hands, and wrists. The ability to quickly move the arms and The ability to exert muscle force repeatedly or continuously over time. This involves muscular endurance and resistance to muscle fatigue. The ability to exert yourself physically over long periods of time without getting winded or out of breath. The ability to lift 50 lbs of weight **Critical Thinking/** Candidate/Student must be able to use The ability to tell when something is wrong logic and reasoning to identify the or is likely to go wrong. It does not involve Observation/ strengths and weaknesses of alternative solving the problem, only recognizing there **Reasoning Skills** solutions, conclusions, or approaches to is a problem. problems. The ability to apply general rules to specific **Problem Sensitivity** problems to produce answers that make **Deductive Reasoning** sense. Inductive Reasoning The ability to combine pieces of information to form general rules or conclusions (includes **Information Ordering** finding a relationship among seemingly Flex Perceptual Speed unrelated events). Selective Attention The ability to arrange things or actions in a Visualization certain order or pattern according to a Category Flexibility specific rule or set of rules (e.g., patterns of Speed of Closure numbers, letters, words, pictures, Memorization mathematical operations). Originality The ability to identify or detect a known Response Orientation pattern (a figure, object, word, or sound) that **Spatial Orientation** is hidden in other distracting material Mathematical Reasoning The ability to quickly and accurately Time Sharing compare similarities and differences among Rate Control sets of letters, numbers, objects, pictures, or Number Facility patterns. The things to be compared may be Work Independently presented at the same time or one after the other. This ability also includes comparing a presented object with a remembered object. The ability to concentrate on a task over a period of time without being distracted. The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged. The ability to generate or use different sets of rules for combining or grouping things in different ways. The ability to quickly make sense of, combine, and organize information into meaningful patterns. The ability to remember information such as words, numbers, pictures, and procedures. The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem. The ability to choose quickly between two or

		more movements in response to two or more different signals (lights, sounds, pictures). It includes the speed with which the correct response is started with the hand, foot, or other body part.  • The ability to know your location in relation to the environment or to know where other objects are in relation to you.  • The ability to choose the right mathematical methods or formulas to solve a problem.  • The ability to shift back and forth between two or more activities or sources of information (such as speech, sounds, touch, or other sources).  • The ability to time your movements or the movement of a piece of equipment in anticipation of changes in the speed and/or direction of a moving object or scene.  • The ability to add, subtract, multiply, or divide quickly and correctly.
Sensory	Candidate/Student must have the ability to use their five senses.  Near Vision Hearing Sensitivity Auditory Attention Depth Perception Far Vision Visual Color Discrimination Night Vision Sound Localization Peripheral Vision Glare Sensitivity	<ul> <li>The ability to see details at close range (within a few feet of the observer).</li> <li>The ability to detect or tell the differences between sounds that vary in pitch and loudness.</li> <li>The ability to focus on a single source of sound in the presence of other distracting sounds.</li> <li>The ability to judge which of several objects is closer or farther away from you, or to judge the distance between you and an object.</li> <li>The ability to see details at a distance.</li> <li>The ability to match or detect differences between colors, including shades of color and brightness.</li> <li>The ability to see under low light conditions.</li> <li>The ability to tell the direction from which a sound originated.</li> <li>The ability to see objects or movement of objects to one's side when the eyes are looking ahead.</li> <li>The ability to see objects in the presence of glare or bright lighting.</li> </ul>

## Behavioral / Social Skills and Professionalism

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. This will include:

- Must be able to work independently in the program.
- 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 everchanging 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 demonstrate workplace responsibilities.

- 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.
- 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

Candidate/Student must be able to communicate not only in speech but reading and writing in English. This will include:

- Sensitivity
- English Communication
- Oral Comprehension
- Oral Expression
- Speech Clarity
- Written Comprehension
- Speech Recognition
- Fluency of Ideas
- Written Expression

- Display sensitivity to multicultural and multilingual needs.
- Communicate in standard English with faculty, peers, customers, and others orally and in writing.
- The ability to listen to and understand information and ideas presented through spoken words and sentences.
- The ability to communicate information and ideas in speaking so others will understand.
- The ability to speak clearly so others can understand you.
- The ability to read and understand information and ideas presented in writing.
- The ability to identify and understand the speech of another person.
- The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).
- The ability to communicate information and ideas in writing so others will understand.

## Working Conditions

Candidate/Student will work:

- Exposed to Contaminants
- In an Enclosed Vehicle or Equipment
- Spend Time Using Your Hands to Handle, Control, or Feel Objects, Tools, or Controls
- Experience Time Pressure
- Have Freedom to Make Decisions
- Required to Be Exact or Accurate
- Spend Time Standing
- Have Interaction With Others
- Have Face-to-Face Discussions
- Exposed to Minor Burns, Cuts, Bites, or Stings
- Exposed to Sounds, Noise Levels
   Can Be Distracting or
   Uncomfortable
- Exposed to Hazardous Equipment
- Cramped Work Space, Awkward Positions
- Wear Common Protective or Safety Equipment such as Safety Shoes, Glasses, Gloves, or Hearing Protection

While most automotive service technicians worked a standard 40-hour week in 2006, 30 percent worked longer hours. Some may work evenings and weekends to satisfy customer service needs. Generally, service technicians work indoors in well-ventilated and lighted repair shops. However, some shops are drafty and noisy. Although many problems can be fixed with simple computerized adjustments, technicians frequently work with dirty and greasy parts, and in awkward positions. They often lift heavy parts and tools. Minor cuts, burns, and bruises are common, but technicians can usually avoid serious accidents if safe practices are observed.

Source: Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2008-09 Edition*, Automotive Service Technicians and Mechanics,

**NOTE:** At time of employment, must have a valid Driver's License, be insurable – to allow test driving of customer vehicles, and expected to pass a drug test **Students will not be able to drive vehicles while in training in the Auto Program without a valid <b>Driver's License.** 

**NOTE:** At time of employment may be expected to have a resume, a Social Security Number or documentation to legally work in the United States and pass a background check.

NOTE: Students must have the ability to access the internet. Up to 25% of required course materials are accessed outside of scheduled course times.

## PLEASE COMPLETE THIS FORM AND RETURN IT TO THE INSTRUCTOR.

TECHNICAL STANDARDS FOR ENROLLMENT IN AUTOMOTIVE

#### **TECHNOLOGY**

Washburn Institute of Technology

## CHECK ALL THAT APPLY.

OFFICE USE ONLY
<b>Date Received</b>

	I understand the expectations, as explained on the previous page, must be for advancement through and successful completion of the <b>Automotive Technology Program</b> .
	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
QUES	ΓΙΟΝS OR COMMENTS: (If additional information, attach another page.)
SIGNA	TUREDATE
PLEA	SE 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, eodirector@washburn.edu.