



Engineering and Applied Technology

Diesel and Heavy Equipment Technology

Purpose Statement

All students in the Diesel and Heavy Equipment program are expected to meet certain technical standards which are essential for successful completion of all phases of the program, and which reflect industry requirements and standards. To verify the student’s ability to perform these essential functions, students may be required to demonstrate the technical standards below.

Meeting these technical standards does not guarantee employment in this field upon graduation. Ability to meet the program’s technical standards does not guarantee a student’s eligibility for any licensure, certification exam, or successful completion of the program.

Technical Standard	Definition of Standards	Examples
Critical Thinking/Problem Solving Skills	Ability sufficient for classroom, lab or work in an industry situation.	<ul style="list-style-type: none"> • Interpret scan tool/test results as being within a normal or abnormal parameter. • Evaluate customer concerns for validity. • Apply technical knowledge of vehicle operation to current situation or problem.
Interpersonal Skills	Abilities sufficient to interact with individuals and groups from a variety of social, emotional, cultural and intellectual backgrounds.	<ul style="list-style-type: none"> • Be able to work alone or in a group and stay focused on the current task. • Demonstrate time management skills. • Communicate information with accuracy and respect.
Communication Skills	Abilities sufficient for writing, reading and comprehending directions or instructions in the class, lab or industry setting.	<ul style="list-style-type: none"> • Read a service manual and comprehend the information. • Write a failure and correction report. • Comprehend/follow written and verbal instructions.
Coping Skills	Abilities sufficient to be productive in a classroom, lab or industry situation.	<ul style="list-style-type: none"> • Be able to cope with deadlines. • Be able to deal with critiques/criticism. • Maintain composure under stressful situations. • Maintain professionalism at all times.
Mobility/Motor Skills	Must possess the ability to lift, stand, stretch, squat, and crawl or contort to any position as required by the repair situation. All positions listed above will be encountered in the class, lab or a	<ul style="list-style-type: none"> • Navigate around objects or obstacles in the floor or overhead. • Lift minimum of 50lbs to chest level from the floor level. • Reach/bend over fenders for extended time.

Technical Standard	Definition of Standards	Examples
	work-based learning setting on a consistent basis.	<ul style="list-style-type: none"> • Be able to move about the shop floor under a variety of floor conditions. • Be able to work in confining or tight spaces. • Operate hand and/or power tools continually. • Be able to work up to 90 minutes without sitting. • Wear appropriate personal protective equipment.
Auditory Skills	Auditory abilities sufficient to work safely in an industry environment, class or lab.	<ul style="list-style-type: none"> • Detect sounds such as squeaks and rattles. • Detect sounds being emitted from the brake system, suspension system and drive train. • Be able to hear verbal instructions, because line of sight not always possible.
Visual Skills	Visual skills adequate to safely work in an industry environment, class or lab.	<ul style="list-style-type: none"> • Interpret information from diagrams, scan tools, and test equipment. • Be able to see in low or poor lighting conditions present under hood or underneath vehicle. • Have an ability to perceive different depths and dimensions.
Tactile Skills	Tactile skills adequate for work in a class, lab or industry environment.	<ul style="list-style-type: none"> • Be able to determine hot or cold temperatures. • Inspect components for wear or failure by touch. • Differentiate diesel fluids based on touch/viscosity.
Environmental	Must be able to function safely under varying environmental factors.	<ul style="list-style-type: none"> • Be able to work in hot or cold conditions. • Maintain focus and productivity in a noisy shop or work place. • Work inside and outside under variable conditions.
Emotional/Behavioral	Emotional/Behavior skills adequate to maintain composure in a stressful environment.	<ul style="list-style-type: none"> • Demonstrate flexibility to calmly change course in the middle of a repair. • Follow directions of an instructor, supervisor, or lead technician. • Demonstrate professionalism, integrity, and honesty. • Perform a proper repair regardless of difficulty. • Cope with stress and other factors that would interfere with the repair.

In the case of an otherwise qualified individual with a documented disability, appropriate and reasonable accommodations will be made unless to do so would fundamentally alter the essential training elements, cause undue hardship, or produce a direct threat to the safety of the student.

Asheville-Buncombe Technical Community College is invested in full compliance with the Americans with Disabilities Act (ADA). Support Services is part of Student Services and is located in the K. Ray Bailey Student Services Center. For detailed information or to request accommodations visit www.abtech.edu/supportservices. An appointment is recommended prior to enrollment in order to discuss any special concerns.