

CERRITOS COLLEGE

AUTOMOTIVE TECHNOLOGY PROGRAM TECHNICAL STANDARDS/ESSENTIAL FUNCTIONS

The following listing has been prepared to assist you in understanding the technical standards of the Automotive Technology program in order to affiliate in the industry and ultimately practice the profession. The technical standards as stated herewith are not conditions of admission to a program of study. Rather, they reflect performance abilities that are necessary for a student to successfully complete the requirements of the specified Technology program.

The purpose of this document is to notify prospective Automotive Technology students of these technical standards to enable them to make an informed decision regarding enrollment in the Automotive Technology program at Cerritos College.

The delivery of safe, effective practice requires that students be able to perform functions related to the technical standards outlined here. The inability of a student to perform these functions may result in the student being unable to meet course objectives and to progress in the Automotive Technology program. Additionally, if a student is unable to perform these required competencies, the student may pose a risk of harm to the customer(s) for whom service is provided.

All applicants meeting the appropriate academic requirements shall be considered equally for admission to Cerritos College or any academic program regardless of physical or mental disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, age, marital status, or genetic information. (Education Code section 66270, Government Code section 11135, Penal Code section 422.6)

Technical Standards Essential Function	Standard Performed Description	Examples of Activities (Not All Inclusive)
Cognitive Ability	<ul style="list-style-type: none">• Demonstrate ability to use logic and technical analysis to identify the strengths and weaknesses of different approaches to complete automotive tasks.• Demonstrate personal time management to complete projects by given deadlines.• Exhibit ability to translate written and/or verbal information into actual projects.• Demonstrate ability to execute work requirements in accordance with written instructions.• Exhibit deductive reasoning.	<ul style="list-style-type: none">• Establish and manage time requirements for automotive project completion.• Demonstrate judgment and decision making as required to organize various tasks to complete automotive assignments and projects.• Exhibit the ability to analyze documentation like repair automotive procedures specifications and then use this knowledge to complete a repair.• Accept constructive criticism from instructor and implement recommendations and/or solutions for improvement.

Technical Standards Essential Function	Standard Performed Description	Examples of Activities (Not All Inclusive)
Communication Ability	<ul style="list-style-type: none"> • Demonstrate use of multiple approaches to convey information. • Demonstrate ability to follow verbal directions. • Demonstrate ability to follow written directions. • Discuss directions and methods required to complete a specific automotive task. • Demonstrate use of industry specific automotive electric symbols to communicate information. 	<ul style="list-style-type: none"> • Use a variety of strategies to convey the necessary automotive information required to complete a specific automotive task or project. • Discuss available alternatives and methods that may be used to accomplish the objective. • Use oral expression, reading, and writing comprehension to verify the information was received.
Interpersonal/ Intrapersonal Skills and Behavior	<ul style="list-style-type: none"> • Demonstrate awareness of other people’s reactions and understand why they react the way they do and how you can improve the reception of your work. • Demonstrate ability to identify the nature of problems. • Demonstrate ability to collaborate with others in a group. • Demonstrate ability to maintain and control self-behavior in a group setting. 	<ul style="list-style-type: none"> • Demonstrate respect for individual differences. • Assist peers in resolving problems or conflicts. • Respond appropriately to emergencies. • Work cooperatively within a group to achieve a goal. • Maintain appropriate self-behavior in a group and/or social environment like a classroom lecture or laboratory demonstration.
Visual Ability	<ul style="list-style-type: none"> • Demonstrate ability to perform required task in both low and bright lighted environments. • Demonstrate ability to visually obtain information from technical information or written standards. 	<ul style="list-style-type: none"> • Precision use of tools and measurement devices such as dial calipers, micrometers, height gages, or others using the thousandths or ten-thousandths scale. • Demonstrate ability to read detailed diagnostic procedures, symbols, and specifications.

Technical Standards Essential Function	Standard Performed Description	Examples of Activities (Not All Inclusive)
Auditory Ability	<ul style="list-style-type: none"> • Demonstrate hearing awareness of potentially hazardous industrial equipment or vehicles. • Demonstrate ability to hear, feel or visually see alarms, bells, sirens, and various other safety alerts. • Demonstrate ability to detect and/or identify machine tool under load and/or being strained. 	<ul style="list-style-type: none"> • Hear and detect safety hazards. • Hear and detect automobiles and industrial equipment problems, overloading, and/or failures.
Tactile Ability	<ul style="list-style-type: none"> • Demonstrate tactile ability sufficient for physical control of tools and equipment. • Demonstrate manual hand dexterity with repetitive precision movements and techniques. • Demonstrate ability to manually manipulate small objects like nuts & bolts. • Demonstrate ability to tactically use multiple extremities simultaneously. • Demonstrate ability to use finger and hand pressure to grip various shaped objects. 	<ul style="list-style-type: none"> • Perform functions of physical control with various hand tools and equipment. • Perform repetitive automotive techniques in multiple positions with both hands simultaneously. (Wrenches, meters, etc.) • Demonstrate ability to have individual hands perform different manual functions simultaneously with very small pieces and fasteners.
Olfactory Ability	<ul style="list-style-type: none"> • Demonstrate ability sufficient to detect contaminant odors in the workplace. • Demonstrate ability to detect gas leaks. • Exhibit identification ability when working with chemicals, solvents, and petroleum based liquids. • Demonstrate ability to detect various burning materials. 	<ul style="list-style-type: none"> • Detect hazardous and/or objectionable machining fumes. • Detect specific flammable gasoline leaks. • Detect burning materials. • Detect smells that represent a potential hazard such as smoke from a fire or burning electrical equipment and/or synthetic materials.

Technical Standards Essential Function	Standard Performed Description	Examples of Activities (Not All Inclusive)
Strength and Mobility	<ul style="list-style-type: none"> • Demonstrate ability to push and pull industrial equipment. • Demonstrate ability to pick up and carry automotive parts. • Demonstrate ability to lift, and move heavy metal projects and/or auto parts manually or by chain fall, come-along, cables, straps, ropes, etc. 	<ul style="list-style-type: none"> • Demonstrate ability to pick up and carry automotive parts. • Demonstrate ability to pick to work in numerous positions from on the ground to overhead as well as over, under, and around parts, projects and/or structures. • Demonstrate ability to move (push and pull) automotive equipment.
Motor Skills	<ul style="list-style-type: none"> • Demonstrate physical abilities including: standing, sitting, walking, stooping, crawling, reaching, squatting, lifting, and bending. • Exhibit full range-of-motion of all extremities. • Demonstrate balance sufficient to conduct precision repetitive movements. • Demonstrate ability to keep balance and equilibrium when in various physical positions. • Demonstrate ability to perform controlled accurate movements, motor skills, and techniques with both hands and both arms independently and/or simultaneously. 	<ul style="list-style-type: none"> • Demonstrate ability to perform physical automotive operations in an industrial laboratory while wearing all required personal protective equipment. • Demonstrate ability to perform various automotive tasks while the body is in an awkward and/or uncomfortable position. • Demonstrate ability to perform repetitive physical movements and motor skills intermittently and/or continuously for extended periods of time. • Demonstrate ability to continuously improve and further develop manual motor skills.

Technical Standards Essential Function	Standard Performed Description	Examples of Activities (Not All Inclusive)
Physical Endurance	<ul style="list-style-type: none"> • Demonstrate sufficient physical endurance to complete assigned work and/or automotive projects. • Demonstrate ability to perform repetitive manual tasks for extended periods of time. • Perform industrial work activities for up to 8 hours while wearing required safety equipment like: Face shields, gloves and boots. • Demonstrate ability to work with hands and arms extended overhead or below the waist for long periods of time. • Demonstrate physical endurance to perform welding work duties in environments like when ambient temperatures exceed 100°F. 	<ul style="list-style-type: none"> • Sit and/or stand for up to 8 hours a day with arms extended to waist level. • Make repetitive motions for several hours with the hands, wrists, arms, and feet. • Perform auto repair operations for up to 8 hours while wearing all required personal safety equipment while utilizing and working automotive equipment. • Perform strenuous automotive activities in adverse conditions and environments that may be hot, cold, windy, noisy, and/or in direct sunlight.
Environmental Tolerance	<ul style="list-style-type: none"> • Demonstrate ability to function safely in an industrial laboratory environment. • Demonstrate ability to work in extremely hot, dusty, noisy environments. • Demonstrate ability to work in highly ventilated and/or forced air environments. • Demonstrate ability to work inside for extended periods of time. • Tolerate exposure to industrial equipment and other potentially hazardous equipment like forklifts, manlifts, overhead cranes, iron workers, shears, saws, and grinders. 	<ul style="list-style-type: none"> • Adapt and work in congested areas and/or confined spaces like under a dash board. • Tolerate odors and fumes associated with automotive repair like gasoline or solvents. • Work indoors while wearing full protective safety equipment. • Tolerate exposure to an environment that contains industrial hazards like: heavy parts and metals, flammable gasses, sharp objects, grinders, hydraulic and electrical equipment.

Disability Statement:

If you have a disability or acquire one, you may be entitled to receive support services and/or accommodations intended to assure you an equal opportunity to participate in, and benefit from, the program. Reasonable accommodations for students with disability related needs will be determined on an individual basis taking into consideration the standards and essential skills which must be performed to meet the program objectives. To receive more information or to apply for services, please contact the Center for Access and Disability Services (CADS) at (562) 860-2451 ext. 2335 or (562) 274-7164 (VP), or visit them in the Santa Barbara Building. All prospective and current Automotive Technology students must be able to meet these standards with or without reasonable accommodations.