



Position Description Instructional Lab Technician II (Auto/MTRK)

Position.....Instructional Lab Technician II (Auto/MTRK)
Department/SiteCareer, Technical and Continuing Education
FLSA.....Non-Exempt
Evaluated by.....Dean of Career, Technical and Continuing Education
Salary Range34

Summary

Performs technical duties to assist in the operation and maintenance of automotive, medium/heavy-duty truck, stationary power generation program instructional laboratories. Assembles, installs, prepares, and maintains vehicles and equipment used in laboratory demonstrations, experiments, simulations, and discovery learning. Coordinates and performs a variety of receiving, inventory, and distribution duties in the operation and maintenance of the automotive and medium/heavy truck laboratories. Provides technical and instructional assistance to students.

Essential Duties and Responsibilities

- Arranges and assists with laboratory assignments/teaching aids, exercises, and exams for the automotive, heavy-duty truck programs and stationary power generation programs. May assist instructors by administering make-up tests.
- Coordinates, maintains, and inspects, perform diagnostic tests and repair vehicles and equipment in the automotive program.
- Coordinates, maintains, inspects, and performs diagnostic tests and repairs vehicles and equipment in medium/heavy-duty truck / stationary power generation technology programs.
- Maintains inventory control systems, orders tools and supplies and maintains records of supplies used for both light duty and heavy-duty applications.
- Monitors the collection and laundering or replacement of lab towels in the automotive and heavy-duty truck labs.
- Maintains safety and general cleanliness in assigned automotive, heavy-duty truck and stationary power generation laboratory areas.
- Monitors operation and maintenance of lab air supply system including piping and compressors for both the automotive and heavy-duty truck program lab areas.
- Maintains automotive and heavy-duty truck laboratory welding and machining equipment.
- Maintains departmental policies and procedures to comply with federal, state, and local hazardous materials, health and safety, hazardous waste regulations in addition to any District Environmental, Health and Safety policies regarding waste disposal, chemical
- Operates equipment and vehicles including trailers, forklifts, and diesel-powered generators.
- Oversees vehicle and machine refueling, including refueling of diesel fuel cells and compressed natural gas tanks.
- Fabricates small equipment pieces such as brackets, fixtures, tool holders, etc., to support program lab functionality.
- Schedules and coordinate maintenance services from vendors for hoist and compressor maintenance and coordinate times with faculty.
- Schedules and receives deliveries of equipment, tools, and vehicles for the automotive, heavy-duty truck, and stationary power generation programs.
- Pick-up supplies and equipment when items are not deliverable.
- Performs other related duties as assigned that support the overall objective of the position.



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- Maintains Material Safety Data Sheets (MSDS), safely disposes and/or stores chemical waste, and coordinates HazMat collection/pick-up/removal.

Qualifications

- Knowledge and Skills

The position requires knowledge of:

- Proper use of hand tools used in automotive or heavy-duty truck service and repair.
- Proper use of power tools used in automotive or heavy-duty truck service and repair.
- Heavy equipment and component slinging and lifting methods.
- Proper use of automotive and heavy vehicle hoist equipment.
- Proper use of gantry crane, boom arm, and overhead monorail hoists.
- Proper use and calibration of precision measurement equipment.
- Mathematical skills to perform calculations required for weight, volume, percentages, electricity, hydraulics, and unit conversions.
- Communication and English language skills to prepare routine correspondence and instructions.
- Welding, metal joining, and metal cutting techniques.
- Upright mill and engine lathe usage.
- Precision torquing techniques.
- Proper electrical and hydraulic schematic interpretation.
- Proper interpretation of engineering drawings for components, assemblies, and structures.
- Use of proper personal protective equipment including high-voltage arc-flash rated PPE.
- Safety precautions pertaining to the maintenance of low voltage/high voltage/hydraulic/ pneumatic/mechanical equipment.
- Heavy truck air brake system operation and safety requirements.
- Federal, state, and local hazardous materials, health and safety, and hazardous wasteregulations.
- Lockout and tag-out procedures as recommended by the NFPA for out-of-commission equipment or vehicles.
- Methods and procedures of inventory control.
- Human-relation/interpersonal-communication skills to guide students and student workers and to convey technical concepts.
- General office computer system operation.

- Abilities

The position requires the ability to:

- Maintain an inventory of necessary supplies and order replenishments.
- Maintain and monitor budgets and spending.
- Determine the necessary personal protective equipment needed for tasks performed throughout the lab.
- Identify non-functioning or malfunctioning equipment through either visual, audio, or other sensory queues.
- Understand and carry out oral and written directions.
- Work independently.
- Set up laboratories in accordance with institutional requirements.
- Assure the care and security of assigned equipment, specialized materials, and supplies.
- Assemble, maintain, and repair lab equipment.
- Communicate effectively both orally and in writing.



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- Establish and maintain effective working and cooperative relationships with others.
- Meet schedules and timelines.
- Implement laws and codes, rules and policies, and other printed matter.
- Identify and operate safety switches, levers, and buttons.
- Identify and interpret posted industrial warning signs.
- Operate metal working tools used in fabrication.
- Operate MIG and TIG welders for steel and aluminum joining.

Physical Abilities

- Incumbent must be able to function effectively indoors and outdoors in a classroom/laboratory environment engaged in work of a moderately active nature.
- Requires sufficient ambulatory ability to stand for extended periods of time, lift and move medium-to-heavy weight materials up to 75 pounds, reach from awkward positions using hand-eye coordination to insert parts, and to climb, balance, and move workstations.
- Requires the ability to pull on moderately loaded levers, switches, and chains from above head-level.
- Requires sufficient arm, hand, and finger dexterity to setup experiments and use a computer keyboard and other office equipment.
- Requires normal hearing and speaking skills to communicate with staff and students in one-on-one and small group settings.
- Requires visual acuity to read printed materials and labels and to observe students perform tests and assignments.

Education and Experience

- Associates degree in either automotive technology, medium/heavy-duty truck technology, power generation technology or related technology discipline, or completion of at least sixty (60) college-level semester units with an emphasis on automotive technology, medium/heavy-duty truck technology or power generation technology and two years of automotive, medium/heavy truck or equipment maintenance experience.

Licenses and Certificates

- Requires a valid driver's license.

Working Conditions

- Work is performed indoors and outdoors where significant safety considerations exist from physical labor, handling of medium-to-heavy weight, awkward materials, and chemicals.