



# AUTOMOTIVE TECHNOLOGY

**PROGRAM DESCRIPTION:** A competency-based program designed following the standards specified by the National Automotive Technicians Education Foundation (NATEF). Students will receive training in eight areas: Automatic Transmission/Transaxle, Brakes, Electrical Systems, Engine Performance, Engine Repair, Heating & Air Conditioning, Manual Drive Train & Axles, and Suspension & Steering.

- **DEGREES OFFERED:** Certificate of Completion, Associate in Applied Science
- **RECOMMENDED PREPARATION:** Pre-algebra, electronics, chemistry or physics, and industrial arts
- **PROGRAM PRE-REQUISITE:** Valid driver's license
- **COST:** Books, Tools and Supplies - approximately \$2,500-\$3,500 for the five-semester program
- **TECHNICAL STANDARDS:** Can be found at <http://tech.honolulu.hawaii.edu/amt>

## THE OCCUPATION

**DESCRIPTION:** Automotive technicians repair and maintain automotive equipment. Duties include diagnosing mechanical problems and adjusting, repairing or replacing parts. To prevent breakdowns, mechanics inspect potential trouble items and lubricate the engine and examine belts, hoses, brake, and fuel systems, and other potentially troubling items. They may diagnose problems with electrical and electronic systems. Many mechanics have their own hand tools.

**SKILLS AND APTITUDES NEEDED:** Good eye-hand coordination, hearing, and vision; good mechanical aptitude; good communication and basic math skills. Ability to identify patterns, analyze ideas, develop, review, and apply solutions.

**WORK SETTING:** Usually indoors. Work areas are sometimes warm, noisy, and filled with gas exhaust. Mechanics often work in cramped positions and handle heavy, greasy parts. May work more than 40 hours a week during busy periods including weekends and holidays.

**PHYSICAL DEMANDS AND HAZARDS:** Some heavy lifting up to 50 lbs. or more; exposure to various chemicals and strong odors; must follow safety practices to avoid accidents.

**EMPLOYERS:** Car dealers, car rental agencies, automotive repair shops, service stations, military, and government motor pools.

**CAREER LADDER:** ENTRY LEVEL: Helper or Apprentice; Intermediate Mechanic. ADVANCEMENT: Master or Lead Technician; Service Writer; Auto Repair Service Estimator; Shop Supervisor; Sales and Service Manager; Small Business Operator

**EMPLOYMENT OPPORTUNITIES:** Balance. Outlook depends on economic conditions, consumer demand for automobile repair, and replacement needs. Because of the growing complexity of automotive technology, especially the use of electronics and computers, demand is expected to increase for repairers of electronic and computer-controlled features. In Hawaii, automobile mechanics may be required to be licensed by the Hawaii motor vehicle repair industry board. Locally and nationally, average employment growth is expected through the year 2014.

**WAGES:** Entry-level rates are around \$10-\$13 an hour; experienced technicians earn \$13-\$21 an hour or more.