AUTOMOTIVE SERVICE TECHNOLOGY, AAS

Program Code: AAS.AUTOSERTECH

The instruction, curriculum, facilities, and equipment of the Automotive Service Technology program have been evaluated by the Automotive Service Excellence Education Foundation (ASEEF) and are accredited to the Master Automotive Service Technician (MAST) level.

Training combines operational theory with hands-on activities in engine repair, automatic transmissions, manual transmission and drive train, suspension and steering, brakes, electrical and electronic systems, heating and air conditioning, engine performance, safety systems, and alternative fuel transportation vehicles.

The program consists of instructional blocks of 100 hours each that are a combination of lecture and hands-on laboratory work. Each instructional block focuses on a specialized area and at the completion, students are assessed according to their success in meeting course outcomes.

Partnerships between CCC and automotive repair businesses will allow you to learn in the classroom and on the job through the Internship and the Cooperative Work Experience (CWE) courses.

The program prepares students to pass ASE certification tests and begin a career as an automotive service technician. Students can achieve industry-recognized ASE certification shortly after earning a degree.

Entry into the program is yearly, typically beginning fall term. An alternate schedule may be available depending on program limits for student seat loads.

For information contact Dustin Bates, 503-594-3973 or dustinb@clackamas.edu, or the Automotive and Welding Department, 503-594-3047.

Outcomes Related Instruction Outcomes

Computation

- 1 course MTH-050 Technical Mathematics I or MTH-065 Algebra II
- · Use appropriate mathematics to solve problems

Communication

- 1 course WR-101 Workplace Writing or WR-121Z Composition I
- Read actively, think critically, and write purposefully and capably for professional audiences

Human Relations

- 1 course Recommended: COMM-100Z Introduction to Communication or PSY-101 Human Relations
- Engage in ethical communication processes that accomplish goals

Physical Education/Health/Safety/First Aid

- 3 credits Recommended: HE-252 First Aid/CPR/AED or MFG-107 Industrial Safety & First Aid
- Use effective life skills to improve and maintain mental and physical wellbeing

Program Outcomes

Upon successful completion of this program, students should be able to:

- work safely in the shop, including addressing environmental concerns related to the industry;
- apply technical knowledge, understanding, and skills to tasks, in accordance with Automotive Service Excellence Education Foundation (ASEEF) Program Accreditation;
- apply the principles of engineering, mathematics, and science to analyze and diagnose electrical, hydraulic, and mechanical concerns in automotive applications;
- research, report, and present industry related data, using computer knowledge and skills;
- · apply critical thinking skills in technical problem solving;
- communicate effectively, both orally and in writing, in an automotive service setting;
- use Industry approved diagnostic equipment to analyze and diagnose vehicle systems.

Requirements

First Year Fall Term Credits AM-101 Intro to Automotive Service Technology 2 5 AM-129 **Electrical Systems I** AM-130 Brake Systems 5 4 MTH-050 Technical Mathematics I or MTH-065 or Algebra II Credits 16 Winter Term AM-131 Suspension Systems 5 AM-133 **Engine Systems** 5 WR-101 Workplace Writing 4 or WR-121Z or Composition I PE/Health/Safety/First Aid requirement 3 First Aid/CPR/AED (Recommended) HE-252 MFG-107 Industrial Safety & First Aid (Recommended) Credits 17 Spring Term AM-135 **Power Transmission Systems** 5 **Engine Performance I** 5 AM-142 Human Relations requirement 3 COMM-100Z Introduction to Communication PSY-101 Human Relations (Recommended) Credits 13 Second Year Fall Term 3 AM-201 Automotive Internship AM-224 5 **Comfort Systems** AM-229 Electrical Systems II 5 Credits 13 Winter Term AM-242 Engine Performance II 5 Automatic Transmission Systems 5 AM-245

AM-280	Auto Mechanics/CWE	6
	Credits	16
Spring Term		
AM-223	Alternative Fuels Transportation Technology	5
AM-225	Safety Systems	5
AM-228	Service Shop Management	4
WLD-102	Introduction to Welding	2
	Credits	16
	Total Credits	91

Careers

Career opportunities include:

- · automotive service mechanic/technician
- · recreational vehicle service technician
- truck service mechanic/technician
- independent repair shops
- dealerships
- fleet maintenance facilities
- start your own business