

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 Communication Skills: Occupational Writing or WR-121 English Composition
- Read actively, think critically, and write purposefully and capably for professional audiences

Human Relations

- 1 course - Recommended: COMM-100 Basic Speech 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

Course	Title	Credits
First Year		
Fall Term		
AM-101	Intro to Automotive Service Technology	2
AM-129	Electrical Systems I	5
AM-130	Brake Systems	5
MTH-050 or MTH-065	Technical Mathematics I or Algebra II	4
Credits		16
Winter Term		
AM-131	Chassis Systems	5
AM-133	Engine Systems	5
WR-101 or WR-121	Communication Skills: Occupational Writing or English Composition	3-4
PE/Health/Safety/First Aid requirement		3
HE-252	First Aid/CPR/AED (Recommended)	
MFG-107	Industrial Safety & First Aid (Recommended)	
Credits		16-17
Spring Term		
AM-142	Engine Performance I	5
AM-235	Power Transmission Systems	5
Human Relations requirement		3
COMM-100	Basic Speech Communication (Recommended)	
PSY-101	Human Relations (Recommended)	
Credits		13
Second Year		
Fall Term		
AM-201	Automotive Internship	3
AM-224	Comfort Systems	5

Course	Title	Credits
AM-229	Electrical Systems II	5
Credits		13
Winter Term		
AM-242	Engine Performance II	5
AM-245	Automatic Transmission Systems	5
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		90-91

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