

AUTOMOTIVE SERVICE AND TECHNOLOGY

The Automotive Technologies program provides students with the knowledge and skills necessary to gain entry into the automotive repair industry. This is a fun and rewarding field, providing high paying jobs and career opportunities for those people with the skills necessary to maintain, diagnose and repair today's incredibly complex automobiles.

Our program offers both a Certificate and an AS degree in Automotive Service and Technology to students who complete courses in all eight of the National Institute for Automotive Service Excellence (ASE) specialization areas: Engine Repair, Engine Performance, Heating and Air Conditioning, Electrical Systems, Automatic Transmissions, Manual Transmission and Axle, Brakes and Front End. We also offer courses designed to provide the renewal of emissions licensing, hybrid vehicle service techniques, update a technician's industry skills and retraining opportunities for entry-level employment. SBCC's Automotive Technologies program is a NATEF (ASE) certified Master Training Institution with all new/updated labs/classrooms and all of our instructors are NIASE (ASE) certified Master Technicians.

Programs of Study

Associate Degree

- Automotive Service and Technology, Associate of Science (AS) (<https://catalog.sbccc.edu/academic-departments/automotive-service-technology/automotive-service-technology-associate-science-as/>)

Certificate of Achievement

- Automotive Service and Technology, Certificate of Achievement (C) (<https://catalog.sbccc.edu/academic-departments/automotive-service-technology/automotive-service-technology-certificate-achievement/>)
- Automotive Basic Maintenance and Light Repair Technician (C) (<https://catalog.sbccc.edu/academic-departments/automotive-service-technology/automotive-basic-maintenance-and-light-repair-technician-certificate-achievement/>)

Credit Courses

Automotive Services & Technology (AUTO)

AUTO 101 Introduction to Auto Mechanics (3 Units)

Hours: 54 (54 lecture)

Lecture/demonstration course introducing the operation and maintenance of the modern automobile; emphasis on the theory of basic operating systems, including engine, electrical, chassis and driveline.

Transfer Information: CSU Transferable

AUTO 102 Basic Car Care, Maintenance and Repair (3 Units)

Hours: 90 (36 lecture, 54 lab)

Introductory study and practice in basic car care, maintenance and repair. Students acquire laboratory experience, performing service and minor repairs.

Transfer Information: CSU Transferable

AUTO 120 Automotive Business and Soft Skills (4 Units)

Hours: 72 (72 lecture)

Presents the operation of automotive business, discussion of various industry roles, and best practices for obtaining and retaining employment in the automotive industry. This course offers preparation for the ASE (Automotive Service Excellence) C1 industry certification test. This ASE Education accredited course provides hands-on application of lecture materials. Employability skills will be discussed and practiced in this course, including: effective time management, maintaining a professional attitude working in a culturally diverse workplace, and industry-standard organizational habits and ethical behavior.

Transfer Information: CSU Transferable

AUTO 130 Automotive Maintenance & Light Repair (4.5 Units)

Hours: 135 (54 lecture, 81 lab)

Presents the theory, operation, maintenance, and light repair of modern automotive vehicle systems. This course offers preparation for the ASE (Automotive Service Excellence) G1 industry certification test. This ASE Education certified course provides hands-on application of lecture materials in the lab. Employability skills will be discussed and practiced in this course, including: effective time management, maintaining a professional attitude working in a culturally diverse workplace, and industry-standard organizational habits and ethical behavior.

Transfer Information: CSU Transferable

AUTO 140 Automotive Engines (4.5 Units)

Hours: 135 (54 lecture, 81 lab)

Presents the theory, operation, diagnosis, service, and repair of automotive internal combustion engines. This course offers preparation for the ASE (Automotive Service Excellence) A1 industry certification test. This ASE Education accredited course provides hands-on application of lecture materials in the lab. Employability skills will be discussed and practiced in this course, including: effective time management, maintaining a professional attitude working in a culturally diverse workplace, and industry-standard organizational habits and ethical behavior.

Transfer Information: CSU Transferable

AUTO 150 Automotive Brakes, Suspension, & Steering Systems (4.5 Units)

Hours: 135 (54 lecture, 81 lab)

Presents the theory, operation, diagnosis, service, and repair of automotive brakes, suspension, and steering systems, including disc and drum brakes, electronic braking systems, tire service, and wheel alignment. This course offers preparation for the ASE (Automotive Service Excellence) A4 and A5 industry certification tests. This ASE Education accredited course provides hands-on application of lecture materials in the lab. Employability skills will be discussed and practiced in this course including: effective time management, maintaining a professional attitude working in a culturally diverse workplace, and industry-standard organizational habits and ethical behavior.

Transfer Information: CSU Transferable

AUTO 160 Automotive Electricity and Electronic Systems (4.5 Units)

Hours: 135 (54 lecture, 81 lab)

Presents the theory, operation, diagnosis, service, and repair of automotive electrical/electronic systems. This course offers preparation for the ASE (Automotive Service Excellence) A6 industry certification test. This ASE Education accredited course provides hands-on application of lecture materials in the lab. Employability skills will be discussed and practiced in this course, including: effective time management, maintaining a professional attitude working in a culturally diverse workplace, and industry-standard organizational habits and ethical behavior.

Transfer Information: CSU Transferable

AUTO 170 Automotive Engine Performance (4.5 Units)

Course Advisories: AUTO 160.

Hours: 135 (54 lecture, 81 lab)

Presents the theory, operation, diagnosis, service, and repair of automotive engine performance systems. This course offers preparation for the ASE (Automotive Service Excellence) A8 industry certification test. This ASE Education accredited course provides hands-on application of lecture materials in the lab. Employability skills will be discussed and practiced in this course, including: effective time management, maintaining a professional attitude working in a culturally diverse workplace, and industry-standard organizational habits and ethical behavior.

Transfer Information: CSU Transferable

AUTO 180 Automotive Heating and Air Conditioning Systems (3 Units)

Course Advisories: AUTO 160.

Hours: 90 (36 lecture, 54 lab)

Presents the theory, operation, diagnosis, service, and repair of automotive heating and air conditioning components. This course offers preparation for the ASE (Automotive Service Excellence) A7 industry certification test. This ASE Education accredited course provides hands-on application of lecture materials in the lab. Employability skills will be discussed and practiced in this course, including: effective time management, maintaining a professional attitude working in a culturally diverse workplace, and industry-standard organizational habits and ethical behavior.

Transfer Information: CSU Transferable

AUTO 190 Automotive Drivetrain Systems (4.5 Units)

Course Advisories: AUTO 160.

Hours: 135 (54 lecture, 81 lab)

Presents the theory, operation, diagnosis, service, and repair of automotive drivetrain systems, including automatic transmissions/transaxles, manual transmissions/transaxles, and driveline components. This course offers preparation for the ASE (Automotive Service Excellence) A2 and A3 industry certification tests. This ASE Education accredited course provides hands-on application of lecture materials in the lab. Employability skills will be discussed and practiced in this course, including: effective time management, maintaining a professional attitude working in a culturally diverse workplace, and industry-standard organizational habits and ethical behavior.

Transfer Information: CSU Transferable

AUTO 200 Automotive Advanced Diagnosis (3 Units)

Course Advisories: AUTO 160.

Hours: 90 (36 lecture, 54 lab)

Presents the theory, operation, diagnosis, service, and repair of advanced engine performance. This course offers preparation for the ASE (Automotive Service Excellence) L1 specialist industry certification tests. This ASE Education accredited course provides hands-on application of lecture materials in the lab. Employability skills will be discussed and practiced in this course, including: effective time management, maintaining a professional attitude working in a culturally diverse workplace, and industry-standard organizational habits and ethical behavior.

Transfer Information: CSU Transferable

AUTO 210 Automotive Hybrid and Electric Vehicle Systems (4.5 Units)

Course Advisories: AUTO 160.

Hours: 135 (54 lecture, 81 lab)

Presents the theory, operation, diagnosis, service, and repair of automotive hybrid and electric vehicle systems and driver assistance systems (ADAS). This course offers preparation for the ASE (Automotive Service Excellence) L3 and L4 industry certification tests. This ASE Education accredited course provides hands-on application of lecture materials in the lab. Employability skills will be discussed and practiced in this course, including: effective time management, maintaining a professional attitude working in a culturally diverse workplace, and industry-standard organizational habits and ethical behavior.

Transfer Information: CSU Transferable

AUTO 290 Work Experience In Automotive Service And Technology (1-4 Units)

Hours: 216 (216 lab)

Automotive majors only. Students must be enrolled in at least one class (other than Work Experience) in their major, plus have a major-related work experience station. Supervised automotive employment for students whose career objectives, automotive course studies and employment complement each other. The student must be employed in an occupation directly related to the Automotive major. Must also be enrolled in no less than seven (7) units, including Work Experience. Course restricted to 3 repetitions