AUTOMOTIVE TECHNOLOGY

Contact Information

Division

Business, Technology and Public Service

Dean

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Overview

The Automotive Technology Curriculum is designed to prepare students to become competent technicians and gain employment in the automotive industry at the completion of the program and to upgrade skills of those already in the field.

Automotive Technology Advisory Committee

- Dave Burkhard, Instructor, San Juan High School
- Robert Butler, Owner, Pacific Auto, Auburn
- Bill Cardwell, Car Care Center, Sacramento
- Lynn Cardwell, Car Care Center, Sacramento
- Art Coppock (Retired), Snap-on Tools, Sacramento
- Vic Delius, Service Manager, Weaver Chevrolet, Alta
- Russ French, Fleet Operations Supervisor, City of Rocklin
- Bill Happ, Woodcreek High School, Roseville
- Steve Ledbetter, Emeritus Professor, Sierra College
- David Lewis, Engineer, Department of Consumer Affairs, Engineering and Technology Research, Sacramento
- Tom Ley, Service Manager, Future Nissan, Roseville
- Mark Means, Instructor, Woodcreek High School, Roseville
- Michelle Oberg, Bureau of Automotive Repair, Citrus Heights
- Dick Panciera, Service Manager (Retired), Reliable Pontiac and Cadillac, Roseville
- John Panelli (Retired), Sierra College Automotive, Colfax
- Alan Rowley, Technician, Monroe Transmission
- Scott Ruskauff, Owner, Back to Life Auto, Lincoln
- Greg Sahr, Technician, Duncan's Auto Service
- John Scalaro, Snap-on Equipment
- Thomas Serpico, Service Manager, Future Nissan
- Vince Wisniewski, Snap-on Tools

Degrees/Certificates

Skills Certificate

Automotive Basics (https://catalog.sierracollege.edu/departments/automotive-technology/#autobasicscredit)

Noncredit Certificate

Automotive Basics (https://catalog.sierracollege.edu/departments/automotive-technology/#autobasicsnc)

Automotive Basics

Skills Certificate

Designed to give students foundational automotive skills, knowledge, and abilities required to enter the workforce.

This is a specialty skills certificate designed to provide career technical skills; it is not equivalent to an associate degree.

Required Courses:

Code	Title	Units
AUTO 0100	Basic Automotive Services and Repair	4
AUTO 0140	Automotive Skill Development	3
Total Units		**7**

Automotive Basics

Noncredit Certificate of Completion

Designed to give students foundational automotive skills, knowledge, and abilities required to enter the workforce.

This is a specialty skills certificate designed to provide career technical skills; it is not equivalent to an associate degree.

Required Courses:

Code	Title	Units
AUTO 0800	Basic Automotive Services and Repair	0
AUTO 0840	Automotive Skill Development	0
Total Units		**0**

Courses

Understanding course descriptions (https://catalog.sierracollege.edu/student-resources/course-information/understanding-course-descriptions/)

AUTO 0028. Independent Study
Units: 1-3
Designed for students interested in furthering their knowledge at an independent study level where no specific curriculum offering is currently available. Independent study might include, but is not limited to, research papers, special subject area projects, and research projects. See Independent Study page in catalog. (CSU)

AUTO 0095. Internship in Automotive Technology
Units: 0.5-4
Designed for advanced students to work in an area related to their educational or occupational goal. Provides new on-the-job technical training under the direction of a worksite supervisor, allowing students to expand knowledge and skills in the chosen field. Mandatory orientation session and faculty approval to determine eligibility. One unit of credit is equal to 54 hours of work. Students may earn up to a total of 16 units in internship courses (any course numbered 95 and PDEV 94). (CSU-with unit limitation)

AUTO 0100. Basic Automotive Services and Repair
Units: 4
Hours: 108 (54 lecture, 54 laboratory)
Presents introductory automotive technical skills used by entry-level service technicians. Course content includes vehicle operation, tool usage, practical measuring skills, fasteners, electrical meter usage, common automotive services and problem solving techniques. Class projects are performed in an automotive shop environment to provide a hands-on experience with common industry tools and equipment. Emphasis is placed on basic shop service operations which meet Automotive Service Excellence (ASE) maintenance and light repair standards. This course will help the student prepare for the ASE G1 service exam. (not transferable)

AUTO 0140. Automotive Skill Development
Units: 3
Prerequisite: Completion of AUTO 100 with grade of “C” or better
Hours: 110 (26 lecture, 84 laboratory)
Covers basic automotive component diagnosis, service and repair for major vehicle systems including: brakes, suspension, heating, air conditioning, electrical, engines and transmissions. Shop activities are designed to further develop skill, speed, and experience capabilities of automotive majors to meet industry diagnostic and repair performance expectations. Emphasis is placed on shop service operations which meet Automotive Service Excellence (ASE) maintenance and light repair standards. This course will help students prepare for the ASE G1 service exam. (not transferable)

AUTO 0800. Basic Automotive Services and Repair
Units: 0
Hours: 108 (54 lecture, 54 laboratory)
Presents introductory automotive technical skills used by entry-level service technicians. Course content includes vehicle operation, tool usage, practical measuring skills, fasteners, electrical meter usage, common automotive services and problem solving techniques. Class projects are performed in an automotive shop environment to provide a hands-on experience with common industry tools and equipment. Emphasis is placed on basic shop service operations which meet Automotive Service Excellence (ASE) maintenance and light repair standards. This course will help the student prepare for the ASE G1 service exam. (pass/no pass grading) (noncredit)

AUTO 0840. Automotive Skill Development
Units: 0
Prerequisite: Completion of AUTO 100 with grade of "C" or better or AUTO 800 with grade of "Pass"
Hours: 110 (26 lecture, 84 laboratory)
Covers basic automotive component diagnosis, service and repair for major vehicle systems including: brakes, suspension, heating, air conditioning, electrical, engines and transmissions. Shop activities are designed to further develop skill, speed, and experience capabilities of automotive majors to meet industry diagnostic and repair performance expectations. Emphasis is placed on shop service operations which meet Automotive Service Excellence (ASE) maintenance and light repair standards. This course will help students prepare for the ASE G1 service exam. (pass/no pass grading) (noncredit)

Program Student Learning Outcomes (PSLOs)

- Develop industry required skills for students to gain automotive service entry level jobs such as lube technicians or technician aids.
- Provide courses for currently employed automotive service students to advance their skill and knowledge to be qualified for advanced placement job (journeyman).
- Support the automotive industry training needs by providing certification/license training courses.