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# ASSOCIATE OF SCIENCE IN AUTOMOTIVE TECHNOLOGY (BASIC) (AS)

This degree prepares students for entry-level employment in the field of Automotive Technology(Basic) through the study of diagnosis, service and repair of automotive systems in an automotive shop environment. Students will acquire skills in working safely in the automotive shop and performing repair tasks correctly and safely using correct tools.

### **Program Outcomes**

- Use the proper automotive terminology to discuss systems operation, methods of diagnosis and needed repairs.
- Prepare a written estimate of needed system repairs and estimate the related costs.
- Practice safety in the repair and service associated with electrical, hydraulic and mechanical systems.
- Demonstrate the ability to describe construction components and apply necessary skills for their respective approach to select the proper method to diagnose, test and repair automotive systems.
- Demonstrate proficiency in the use of automotive diagnostic equipment to evaluate system performance and determine needed repairs.

### **Career Opportunities**

Upon successful completion of this degree, students will be prepared for careers or employment in the following fields: automotive and transmission disassembly, repair or rebuilding, diagnosis and repair or replacement of clutch assemblies, and the diagnosis, repair and servicing of differentials, electronic and electrical systems, suspension and steering systems, brake systems, heating and air conditioning, and drivability concerns and engine performance.

This degree will also meet national certification and training standards (NATEF) for automotive service excellence and (ASE) testing and certification in all automotive categories.

# Note

This degree is not designed for transfer; however, the courses included in this degree may be transferable and apply to other degrees designed for transfer.

# **Program Requirements**

Code	Title	Units
GENERAL EDUCATION AND SUBJECT REQUIREMENTS		
College of the Sequoias Associate Degree General Education (COS-GE)		
+		
REQUIRED MAJOR COURSES		35
AUTO 130	Introduction to Automotive Technology	3
AUTO 136	Automotive Electrical Systems	4
AUTO 231	Automotive Engine Systems	4
AUTO 232	Auto Automatic Transmissions	4
AUTO 233	Automotive Power Train Systems	4

AUTO 234	Auto Suspension/Steering System	4
AUTO 235	Automotive Brake Systems	4
AUTO 237	Automotive Air Conditioning	4
AUTO 238	Automotive Engine Performance	4

#### ELECTIVES

Select additional degree applicable courses numbered 1-299 to achieve 60 units

#### TOTAL

The Associate Degree requirements include completion of the:

- 1. Required Major and Restricted Elective courses with a minimum grade of "C" or better for each course (Required Major and Restricted Elective courses may be substituted with the approval of the Division Chair),
- 2. General Education requirements, and
- A minimum of 60 units of degree-applicable courses numbered 001-299. At least 12 units must be taken in residence at College of the Sequoias, with a "C" (2.0) average (see Associate Degree Requirements (https://nam11.safelinks.protection.outlook.com/? url=https%3A%2F%2Ffuturecatalog.cos.edu%2Fassociatedegree-requirements%2F&data=05%7C02%7Cdanielal%40cos.edu %7Ccdf509fcbe0541525de708dd2e8e1629%7Ca1ac1160f96f4e1abad8aa9c4be %7C0%7C0%7C638717909975534704%7CUnknown %7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIIYiOilwLjAuMDAwMCIsIIAiO %3D%3D%7C0%7C%7C%7C%sdata=vY %2FtRcsJbw0k6zI04fyP1rWRAAgk6JFJOIWk6ohdDVI %3D&reserved=0) for additional details).