

## **AUTOMOTIVE TECHNOLOGY ASSOCIATE OF SCIENCE**

A degree in Automotive Technology prepares students with the skills and knowledge necessary to perform diagnosis and repair in the automotive shop environment. This program includes coursework that is essential for entry-level positions and enhances the skills and knowledge base of those who are seeking career progression within the automotive industry or transfer to a university. Completing this degree prepares students to pass ASE certification tests and satisfies the California Bureau of Automotive Repair training requirements for certification as a licensed smog Inspector.

### **Required Courses – Major**

| Course Number             | Course Name                                 | Units     |
|---------------------------|---------------------------------------------|-----------|
| AUT 140                   | Automotive Engines                          | 4         |
| AUT 142                   | Brakes/Suspension/Alignment                 | 6         |
| AUT 144                   | Manual Transmissions/Power Trains           | 3         |
| AUT 145                   | Automotive Transmissions/Power Trains       | 4         |
| AUT 146                   | Automotive Air Conditioning/Heating Systems | 2         |
| AUT 162                   | Automotive Electrical Systems               | 5         |
| AUT 166                   | Automotive Diagnosis and Tune-Up            | 6         |
| AUT 170                   | Advanced Engine and Emission Controls       | 6         |
| <b>Total Major Units</b>  |                                             | <b>36</b> |
| <b>Total Degree Units</b> |                                             | <b>60</b> |

### **Program Level Student Learning Outcomes:**

1. Locate service information from available sources, determine specifications, locate procedures, determine parts and labor charges and accurately complete a repair order.
2. Describe the theory and operation of automotive systems and circuits. Explain technical procedures and legal processes.
3. Demonstrate competency in service and repair by being able to test, adjust, diagnose, repair, calibrate, and validate repairs on a variety of automotive systems.
4. Demonstrate knowledge of safe working habits in an automotive repair facility.