

AUTOMOTIVE TECHNOLOGY – ALL AUTOMOTIVE SYSTEMS – ASSOCIATE IN SCIENCE DEGREE, CERTIFICATE OF ACHIEVEMENT

Top Code: 0948.00

The curriculum prepares students for entry-level employment in automotive areas such as an apprentice mechanic, assistant technician, mechanic's helper, predelivery technician, installer, service technician, service attendant, or smog technician trainee. Students in the Automotive Technology program gain valuable hands-on experience in diagnosis and repair of vehicles while using the National Education Technicians Foundation (NATEF) task list as a guide. Instruction includes automotive engines, transmissions and drive lines (RWD & FWD) for both automatic and manual systems, suspension systems, braking systems (including ABS), air conditioning systems, and engine performance including most state and federally mandated requirements. Upon successful completion of the curriculum, students receive credit for one year of work experience when applying for certification by the National Institute of Automotive Service Excellence (ASE). This Certificate prepares students for the ASE 1-8 Professional Exams. ASE Student Examinations are administered within program courses.

This program has lab fees, uniform and DMV requirements. This curriculum is National Technicians Education Foundation (NATEF) approved and renewed in 2016.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes

1. Apply theories of automotive system fundamentals operation to practical diagnostic scenarios encountered during automotive service and repair.
2. Demonstrate the safe set-up and operation of diagnostic, hand, special service, and machine tools utilized by standard automotive repair industry.
3. Develop diverse skill sets pertaining to the National Automotive Technician Education Foundation (NATEF) standards and performance tasks.
4. Demonstrate technical and diagnostic skills while following the proper documentation process as required by the Bureau of Automotive Repair.

Requirements for the Certificate of Achievement

Required Courses

Code	Title	Units
AUTO 200	AUTOMOTIVE FUNDAMENTALS FOR TECHNICIANS	4
AUTO 206A	BASIC AUTOMOTIVE ELECTRICAL SYSTEMS	4
AUTO 201	ENGINE OPERATION & TESTING	6

AUTO 206B	AUTOMOTIVE ELECTRICAL SYSTEMS	4
AUTO 202	AUTOMATIC TRANSMISSION AND TRANSAXLES	5
AUTO 203	MANUAL TRANSMISSION, TRANSAXLE, AND DRIVETRAIN	5
AUTO 205	AUTOMOTIVE BRAKE SYSTEMS	4
AUTO 204	AUTOMOTIVE SUSPENSION & STEERING	6
AUTO 208	ENGINE PERFORMANCE	6
AUTO 207	AUTOMOTIVE HEATING & AIR CONDITIONING	3
Total Units		47

Recommended Electives

Code	Title	Units
BUS 011A	BUSINESS COMMUNICATIONS	3
BUS 160	SALES AND CUSTOMER SERVICE	3
MIT 101	INTRODUCTION TO ROBOTICS	4

Visit the Program Mapper (<https://pasadena-city.programmapper.ws/academics/interest-clusters/7e85bdcc-be06-405f-9845-b8b63e49f8c6/programs/57205bfc-9e29-5c4e-240d-dfb65946763a/>) for a suggested sequence of courses.

General Education Requirements for the Associate in Science Degree

- General Information (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/>)
- PCC Local Gen Ed (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#pcclocaltext>)
- CSU Breadth (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#csubreadthtext>)
- IGETC (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#igetctext>)