

AUTOMOTIVE TECHNOLOGY – POWERTRAIN TECHNICIAN – ASSOCIATE IN SCIENCE DEGREE, CERTIFICATE OF ACHIEVEMENT

TOP Code:

0948.00

The curriculum prepares students for entry-level employment in transmission repair. Students will gain valuable hands-on experience in removing, rebuilding, and adjusting manual and automatic transmissions and transaxles, clutches, drivelines, universal joints, constant-velocity (CV) joints, and differentials. The use of precision equipment and specialty tools is emphasized. Students are encouraged to take the Automotive Service Excellence (ASE) examinations for Automatic Transmission/Transaxle (A2) and Manual Drive Train and Axles (A3). ASE Student Certifications are administered within the 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

- Demonstrate the proper setup and operation of transmission diagnostic and service tools used in the automotive industry.
- Apply automatic and manual transmission theories of operation to practical diagnostic scenarios encountered during service and repairs of automatic and manual transmissions/transaxles and drive trains.
- Apply hands-on skill sets pertaining to the National Automotive Technician Education Foundation (NATEF) standards and performance tasks for automatic and manual transmissions, transaxles, and drive trains.

Requirements for the Certificate of Achievement

Code	Title	Units
AUTO 200	AUTOMOTIVE FUNDAMENTALS FOR TECHNICIANS	4
AUTO 202	AUTOMATIC TRANSMISSION AND TRANSAXLES	5
AUTO 203	MANUAL TRANSMISSION, TRANSAXLE, AND DRIVETRAIN	5
AUTO 206A	BASIC AUTOMOTIVE ELECTRICAL SYSTEMS	4
Total Units		18

Recommended Electives

Code	Title	Units
WELD 145	INTRODUCTION TO TIG WELDING	1

Visit the Program Mapper (<https://pasadena-city.programmapper.ws/academics/interest-clusters/7e85bdcc-be06-405f-9845-b8b63e49f8c6/programs/a7e93c1f-1d21-6cc0-90ff-89a1ed6b79cc/>) 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>)