

# AUTOMOTIVE CAREER EDUCATION EXPERT TECHNICIAN, CERTIFICATE OF ACHIEVEMENT

The Automotive Expert Technician Certificate of Achievement provides technical preparation for the skills necessary for a position as a bumper-to-bumper expert-level technician. Internship hours as an automotive technician are required to complete this program. Students will learn how to perform inspection, service, repair, and diagnosis of engine mechanical systems, brake systems, steering and suspension systems, electrical and electronic systems, heating and air-conditioning systems, driver and passenger comfort systems, drivetrain and powertrain control systems, and hybrid vehicle systems. Assessments occur through written exams and skills competency assessments with an emphasis on service, repair, and diagnostic procedures. Critical thinking skills, practical hands-on skills, safety, and employability (soft) skills are practiced throughout the curriculum. Students who successfully complete this program may continue their automotive education by pursuing an AS degree and transfer opportunities to Bachelor of Science degree in Automotive Technology (for example, Weber State University, Pittsburg State University, Rio Hondo College).

Course ID	Title	Units/Hours
<b>Required Core (52 units):</b>		
ACE V12	Automotive Electrical Systems I	4
ACE V13	Automotive Engine Repair	4
ACE V21	Automotive Brake Systems	4
ACE V22	Automotive Steering and Suspension Systems	4
ACE V23	Automotive Electrical Systems II	4
ACE V31	Automotive Heating and Air Conditioning	4
ACE V32	Automotive Engine Management	4
ACE V33	Automotive Manual Transmissions and Transaxles	4
ACE V41	Automotive Automatic Transmissions and Transaxles	4
ACE V42	Automotive Engine Driveability	4
ACE V43	Automotive Hybrid Systems Repair and Diagnosis	3
AUTO V96	Automotive Internship II (*)	9
<b>Total Units</b>		<b>52</b>

\*A note concerning the Internship:

AUTO V96 (<https://catalog.vcccd.edu/search/?search=auto+v96&caturl=%2Fventura>), Automotive Internship II, is taken as a 3-unit course in three of the four semesters, for a total of 9 units.

Year 1		Units/Hours
Fall Semester		
ACE V12	Automotive Electrical Systems I	4
ACE V13	Automotive Engine Repair	4

AUTO V96	Automotive Internship II (Total unit requirement is 9; 3 semesters of internship)	3
<b>Units/Hours</b>		<b>11</b>
<b>Spring Semester</b>		
ACE V21	Automotive Brake Systems	4
ACE V22	Automotive Steering and Suspension Systems	4
ACE V23	Automotive Electrical Systems II	4
AUTO V96	Automotive Internship II (Total unit requirement is 9; 3 semesters of internship)	3
<b>Units/Hours</b>		<b>15</b>
<b>Year 2</b>		
<b>Fall Semester</b>		
ACE V31	Automotive Heating and Air Conditioning	4
ACE V32	Automotive Engine Management	4
ACE V33	Automotive Manual Transmissions and Transaxles	4
AUTO V96	Automotive Internship II (Total unit requirement is 9; 3 semesters of internship)	3
<b>Units/Hours</b>		<b>15</b>
<b>Spring Semester</b>		
ACE V41	Automotive Automatic Transmissions and Transaxles	4
ACE V42	Automotive Engine Driveability	4
ACE V43	Automotive Hybrid Systems Repair and Diagnosis	3
<b>Units/Hours</b>		<b>11</b>
<b>Total Units/Hours</b>		<b>52</b>

Upon successful completion of this program, students will be able to:

- Perform maintenance service and repair procedures in a timely manner and to industry standards.
- Perform chassis and undercar system inspection, service, and repair in a timely manner and to industry standards.
- Perform electrical and electronic system diagnosis in a timely manner and to industry standards.
- Perform heating, air-conditioning, and driver/passenger comfort system diagnosis in a timely manner and to industry standards.
- Perform powertrain and drivetrain diagnosis in a timely manner and to industry standards.
- Perform hybrid vehicle safety, inspection, service, and light repair procedures in a timely manner and to industry standards.