



This program roadmap represents one possible pathway to complete the program. **Please see a counselor** to create an education plan that is customized to meet your needs. This roadmap is not a guarantee of course availability or financial aid applicability.

Catalog: 2024-25

Total Units: 58

First Year

Semester 1

12 Units

CAT.	COURSE	TITLE	UNIT
RE	AT 100	Technical Basics for the Automotive Professional	3
Req	AT 105	Mathematics for Automotive Technology	3
Req	AT 180	Automotive Data Acquisition	3
Req	AT 181	Electrical Fundamentals and Multimeter Basics	3

Semester 2

12 Units

CAT.	COURSE	TITLE	UNIT
Req	AT 110	Automotive Brakes	3
RE	AT 130	Manual Drive Trains and Axles	3
Req	AT 311	Suspension and Steering Systems	3
RC	AT 314 ¹	Automotive Engine Repair	3

¹ AT 314 is not part of this certificate but is a prerequisite to AT 333.

Second Year

Semester 3

12 Units

CAT.	COURSE	TITLE	UNIT
Req	AT 310	Heating and Air-Conditioning Systems	3
Req	AT 330	Automotive Electrical Systems	3
RC	AT 333 ²	California State Smog Check Inspector Training	6

² AT 333 is not part of this certificate but is a prerequisite to AT 332.

Semester 4

12 Units

CAT.	COURSE	TITLE	UNIT
Req	AT 331	Advanced Automotive Electrical Systems	3
Req	AT 341	Alternative Fuels and Advanced Technology Vehicles	3
Req	AT 343	Electric Vehicle Construction, Diagnosis and Repair	3
Req	AT 345	Hybrid Electric Vehicle Technology, Service and Repair	3

CAREER PATH

Career Options:

This program prepares students for entry-level positions in the automotive industry with emphasis on alternative fuel and electric vehicle drive systems and complete automotive systems diagnosis and repair.

Other Notes:

- An internship (AT 298) is highly recommended as it opens up potential employment opportunities. Students can earn at least 1 unit for related paid or unpaid work experience including volunteer and internship positions through AT 298. See the [Work Experience website](#) for more information.
- At the end of semester 5 students qualify for the **Air Conditioning Service certificate**, the **Automotive Suspension and Steering certificate**, and the **Automotive Brakes certificate**.

Third Year

Semester 5**10 Units**

CAT.	COURSE	TITLE	UNIT
Req	AT 332	Engine Performance & Electronic Engine Controls	6
Req	AT 347	Advanced Hybrid and Electric Vehicle Technology Service and Repair	3
Req	AT 298 ³	Work Experience in Automotive Technology	1

³ or AT 140**EXPLANATION OF CATEGORIES**

RE	Restricted Elective	A course selected from a list of elective courses specified for this program in the course list in the catalog, which can be replaced with another course from the same list
Req	Required Core	A course that is required for this program
RC	Recommended Course	A course that is not part of this program but is included in its roadmap

Published April 13, 2024