



# Automotive Mechanics Technology Certificate

This one-year curriculum is designed for students seeking basic job entry skills for employment in the automotive field. A subsequent certificate and/or an Associate degree in Automotive Mechanics Technology can be earned without the need to repeat courses completed as part of this certificate.

**Total Units: 43**

## First Year

### Semester 1

**22 Units**

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>AMT 300</b> <sup>Z</sup> Automotive Fundamentals and Shop Procedures	4		F, S
<b>AMT 303</b> <sup>Z</sup> Automotive Electrical & Electronic Systems	4		F, S
<b>AMT 314</b> <sup>Z</sup> Wheel Alignment	3	Advisory: AMT 300	F (may also be offered in S)
<b>AMT 316</b> <sup>Z</sup> Automotive Brakes	3	Advisory: AMT 300	F, S
<b>AMT 326</b> <sup>Z</sup> Automotive Heating and Air Conditioning	3	Pre-req: AMT 303	S(may also be offered in F)
<b>5 units from List A</b>	5	See List A	See List A

<sup>Z</sup> At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

### Semester 2

**21 Units**

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>AMT 304</b> <sup>Z</sup> Automotive Manual Drive Train and Axles	3	Advisory: AMT 300	S(may also be in F)
<b>AMT 310</b> <sup>Z</sup> Engine Performance	3	AMT 300, 306 or 322; Advisory:: A<T 303	F, S
<b>AMT 322</b> <sup>Z</sup> Engine Repair	3	Advisory: AMT 300 & 306	F, S
<b>AMT 324</b> <sup>Z</sup> Electronic Fuel Injection	3	AMT 303; Advisory: AMT 310	F(may also be offered in S)
<b>AMT 330</b> <sup>Z</sup> Automatic Transmissions/Transaxles	3	Advisory: AMT 300 & 304	F, S

## Career Options/Outlook:

Master mechanics repair virtually any part on the vehicle or specialize in the transmission system. Tasks include test-drive vehicles and test components/systems using equipment such as infrared engine analyzers, compression gauges, and computerized diagnostic devices; test and adjust repaired systems to meet manufacturers' performance specifications; repair, reline, replace, & adjust brakes; review work orders and discuss work with supervisors; confer with customers to obtain descriptions of vehicle problems and to discuss work to be performed.

## A sample of reported job titles:

ASE Master Mechanic (Automotive Service Excellence Master Mechanic), Auto Technician, Automotive Drivability Technician, Automotive Mechanic (Auto Mechanic), Automotive Service Technician, Certified ASE Master Automotive Technician (Certified Automotive Service Excellence Master Automotive Technician), Master Automotive Technician, Master Technician, Mechanic, Transmission Rebuilder

## Projected job openings in California (2020-2030):

6,900

## Projected growth in California (2020-2030):

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>AMT 332</b> <sup>Z</sup> Automotive Computerized Controls	3	AMT 303; Advisory: AMT 310	S(may also be offered in F)
<b>3 units from List B</b>	3	See List B	See List B

<sup>Z</sup> At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

^You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

\*(O) = online available (P) = partially online

## List A-a minimum of 5 units from the following:

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>AMT 301</b> <sup>Z</sup> Automotive Service Management	3		F(P), S(P)
<b>AMT 306</b> <sup>Z</sup> Small Engine Repair	3		F(may also be offered in S)
<b>AMT 498</b> <sup>Z</sup> Work Experience in Automotive Mechanics Technology	0.5-4		F, S, Su

<sup>Z</sup> At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

## List B-a minimum of 3 units from the following:

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>AMT 321</b> <sup>Z</sup> Advanced Automotive Electrical & Hybrid Vehicle Systems	3	AMT 303	S(may also be offered in F)
<b>AMT 328</b> <sup>Z</sup> Light Duty Diesel Engine Performance	3	AMT 303; Advisory: AMT 300	Check Class Schedule for offering
<b>AMT 340</b> <sup>Z</sup> Emission Control Inspection and Repair	5	AMT 303 & 310 or AMT 371 & 381; Advisory: AMT 324 & 332	F, S

<sup>Z</sup> At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free

4% growth

## Median Salary in California (2021):

\$50,740/yr

## Source:

<https://www.onetonline.org/link/summary/49-3023.00>

## Completing this certificate

also represents the completion of a National Automotive Technicians Education Foundation (NATEF) accredited Master Automotive Service Technology (MAST) program. Instructors for this program are Automotive Service Excellence (ASE) certified as required by NATEF standards.

## This map also meets the requirement for the following certificates:

- Automatic Transmission and Transaxles Certificate of Achievement
  - Automotive Brakes Certificate of Achievement
  - Automotive Heating and Air Conditioning Certificate of Achievement
  - Automotive Suspension and Steering Certificate of Achievement
- With the selection of AUTO 321, this will meet the requirements for:**
- Automotive Electrical Systems Certificate of Achievement
  - Automotive Engine Performance Certificate of Achievement

**With the selection of AUTO 306, this will meet the requirements for:**

Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

· Automotive Engine Repair Certificate of Achievement

· Small Engine Repair Certificate of Achievement

## About this map:

This program map 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 map is not a guarantee of course availability or financial aid applicability.

## Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the [Zero Textbook Costs page](#) of the college website.

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