

# AUTOMOTIVE TECHNOLOGY

## PROGRAM DESCRIPTION:

The Automotive Technology curriculum is designed to provide students with the skills and knowledge necessary to succeed as technicians in the automotive service industry. The Automotive Technology program at Chaffey College provides instruction pursuant to the standards defined by the National Automotive Technician Education Foundation.

## CAREER AT A GLANCE:

### HOW DO I KNOW IF THIS MAJOR IS FOR ME?

- You enjoy diagnosing and repairing vehicles
- You enjoy working with your hands *and* your mind
- You enjoy repairing machines or systems
- You like to troubleshoot causes of system defects
- You enjoy activities that involve practical, hands-on problem solving
- You enjoy working with hand and power tools, including computerized equipment
- You enjoy working on your own and making decisions

***Use Focus2Career on your MyChaffey portal to learn more about careers and majors that fit you best.***

### WHERE CAN I WORK?

Automotive Repair Shops	Automobile Dealers
Specialty Shops	Auto Parts, Accessories & Tire Stores
Gasoline Service Stations	Federal/State Government
Schools & Colleges	Manufacturing
Business Owner	Smog Check Station
Fleet Service Facilities	

***For more information visit: [www.labormarketinfo.edd.ca.gov/OccGuides](http://www.labormarketinfo.edd.ca.gov/OccGuides)***

### HOW DO I GET STARTED?

- Start taking introductory automotive courses
- Apply for entry level positions in customer service with employers where you would like to promote
- Job shadow and network with automotive professionals
- Update resume to include technical skills and classroom experiences
- Participate in the campus Car Club

### WHAT CAN I DO WITH THIS CERTIFICATE AND/OR ASSOCIATE DEGREE?

<i>Position Title</i>	<i>CA Median Salary</i>
General Automotive Service Technician	\$43,620
Automotive Specialty Technician	\$43,620
Motorcycle Technician	\$43,810
Automotive Machinist	\$43,400
Brake Technician	\$46,431
Service Station Technician	\$43,620
Marine Service Technician	\$43,620
Transmission Specialist	\$43,620
Air-Conditioning Technician	\$43,620
Engine Performance Technician	\$46,431
Smog Check Technician	\$40,710
Master Automotive Technician	\$43,620
Steering and Suspension Technician	\$43,620
Fleet Service Technician	\$43,620
Service Writer	\$43,620

### WHAT CAN I DO WITH HIGHER EDUCATION AND ADDITIONAL TRAINING?

<i>Position Title</i>	<i>CA Median Salary</i>
Career and Technical Education Teacher	\$74,130
Service Manager	\$93,780
Automotive Engineer	\$98,260
Transportation Manager	\$93,780
Materials Engineer	\$113,380
Industrial Designer	\$68,700
Car Design Engineer	\$98,260
Store Sales Manager	\$111,750
District Manager	\$135,460

***For more information about careers, education and training requirements, salary data, and job outlooks visit***

***[www.onetonline.org](http://www.onetonline.org)***

For additional information about career pathways and to find out if this major is a good fit for you visit the Career Center located in MACC 203. Career information was collected from [www.onetonline.org](http://www.onetonline.org) and [www.bls.gov](http://www.bls.gov).

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**MAJOR AND COURSE REQUIREMENTS:**

**LEGEND:** G=Grade    IP=In Progress    N=Need    **Bold: Prerequisites**    Plain Text: No Prerequisites

**General Automotive Service Technician**

The General Automotive Technician curriculum is designed to provide students with the skills and knowledge necessary to obtain entry level employment as automotive service and repair technicians. Students who successfully complete the requirements for the General Automotive Technician Associate of Science Degree will be able to perform basic automotive maintenance and service operations and be immediately productive on the job.

The General Automotive Service Technician Certificate prepares students for entry level employment as automotive service and repair technicians. Basic automotive maintenance and service operations are stressed to allow students to be immediately productive on the job. Safety and environmental protection are also stressed. Consumer protection and professional ethics are covered in depth.

<i>Major Requirements for the General Automotive Service Technician Associate in Science Degree: (S056)</i>		Grade	IP	Need	Units
AUTOTEC 450	General Automotive Technician A (or AUTOTEC 10, Service & Repair, 4 <b>and</b> AUTOTEC 417, Brakes, 4 <b>and</b> AUTOTEC 418, Suspension and Steering Systems, 4)				12
AUTOTEC 455	General Automotive Technician B (or AUTOTEC 15, Auto Electricity and Electronics, 2 <b>and</b> AUTOTEC 416, Basic Auto Air Conditioning Systems, 2 <b>and</b> AUTOTEC <b>422, Fuel, Ignition, and Emission Control Systems, 5)</b>				12

Student Name: \_\_\_\_\_

ID#: \_\_\_\_\_

Date: \_\_\_\_\_

Counselor: \_\_\_\_\_

***Requirements for the General Automotive Service Certificate: (L446)***

Same as the major requirements for the A.S. Degree

<b>COUNSELOR NOTES:</b>

\$46 per unit for CA Residents

In addition to completion of the MAJOR, there are other requirements for the degree, refer to the Chaffey College Graduation Requirement Sheet or see a counselor in the Counseling Center.  
All courses required for a certificate must be completed with a minimum grade of C.

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### Master Automotive Technician

Students who successfully complete the requirements for the Master Automotive Technician Degree or Certificate will be qualified to take the examinations required for certification as an Automotive Master Technician and will receive credit for one year of related work experience towards certification.

Students who successfully complete the requirements for the Master Automotive Technician Certificate will be qualified to take the examinations required for certification as an Automotive Master Technician and will receive credit for one year of related work experience towards certification.

<i>Major Requirements for the Master Auto Technician Associate in Science Degree: (S055)</i>		Grade	IP	Need	Units
<b>AUTOTEC 423</b>	<b>Engine Management Systems and Drivability</b>				<b>4</b>
<b>AUTOTEC 427</b>	<b>Engine Operation and Service</b>				<b>5</b>
<b>AUTOTEC 429</b>	<b>Advanced Automotive Electrical Systems</b>				<b>4</b>
<b>AUTOTEC 432</b>	<b>Manual and Automatic Transmissions, Transaxles, and Drive Trains</b>				<b>5</b>
AUTOTEC 450	General Automotive Technician A (or AUTOTEC 10, Service & Repair, 4 and AUTOTEC 417, Brakes, 4 and AUTOTEC 418, Suspension and Steering Systems, 4)				12
AUTOTEC 455	General Automotive Technician B (or AUTOTEC 15, Auto Electricity and Electronics, 2 and AUTOTEC 416, Basic Auto Air Conditioning Systems, 2 and <b>AUTOTEC 422, Fuel, Ignition, and Emission Control Systems, 5)</b>				12

### *Requirements for the Master Automotive Technician Certificate: (T055)*

Same as the major requirements for the A.S. Degree

### Automotive Electrical Systems

The Automotive Electrical Systems Certificate prepares the student for employment as an automotive electrical systems specialist. Students with the certificate are qualified to take Automotive Service Excellence (ASE) examination for certification.

### *Requirements for the Automotive Electrical Systems Certificate: (E445)*

*\*Non-Transcribed*

		Grade	IP	Need	Units
AUTOTEC 10	Service and Repair				4
AUTOTEC 15	Automotive Electricity and Electronics				2
<b>AUTOTEC 407</b>	<b>Introduction to Hybrid Vehicles</b>				<b>2.5</b>
<b>AUTOTEC 416</b>	<b>Basic Automotive Air Conditioning Systems</b>				<b>2</b>
<b>AUTOTEC 429</b>	<b>Advanced Automotive Electrical Systems</b>				<b>4</b>

In addition to completion of the MAJOR, there are other requirements for the degree, refer to the Chaffey College Graduation Requirement Sheet or see a counselor in the Counseling Center. All courses required for a certificate must be completed with a minimum grade of C.

### ***Engine Performance (Smog Check)***

The Engine Performance Certificate provides the training required by the California Smog Check program and qualifies the student to take the Smog Check Technician license examination.

### ***Requirements for the Engine Performance (Smog Check)***

#### ***Technician Certificate: (L448)***

		<b>Grade</b>	<b>IP</b>	<b>Need</b>	<b>Units</b>
AUTOTEC 10	Service and Repair				4
AUTOTEC 15	Automotive Electricity and Electronics				2
<b>AUTOTEC 422</b>	<b>Fuel, Ignition, and Emission Control Systems</b>				<b>5</b>
<b>AUTOTEC 423</b>	<b>Engine Management Systems and Drivability</b>				<b>4</b>
<b>AUTOTEC 429</b>	<b>Advanced Automotive Electrical Systems</b>				<b>4</b>
<b>AUTOTEC 443</b>	<b>Engine and Emission Control Training Level I</b>				<b>4</b>

### ***Engine Rebuilding Certificate***

The Engine Rebuilding Certificate prepares students for employment as an automotive machinist.

### ***Requirements for the Engine Rebuilding Certificate: (L449)***

#### ***\*Non-Transcribed***

		<b>Grade</b>	<b>IP</b>	<b>Need</b>	<b>Units</b>
AUTOTEC 430	Engine Rebuilding-Upper Engine				5
AUTOTEC 431	Engine Rebuilding-Lower Engine				5

### ***High Performance Engines Building and Blueprinting***

The High Performance Engines Building and Blueprinting Certificate signifies that the student had developed skills in advanced engine machining and modification for improved performance. Students build on the skills developed in engine rebuilding courses to learn how to build and blueprint engines that exceed the manufacturer's original horsepower and torque ratings.

### ***Requirements for the High Performance Engines Certificate: (E110)***

#### ***\*Non-Transcribed***

		<b>Grade</b>	<b>IP</b>	<b>Need</b>	<b>Units</b>
AUTOTEC 430	Engine Rebuilding-Upper Engine				5
AUTOTEC 431	Engine Rebuilding-Lower Engine				5
<b>AUTOTEC 435</b>	<b>High Performance Engine Building and Blueprinting</b>				<b>5</b>

In addition to completion of the MAJOR, there are other requirements for the degree, refer to the Chaffey College Graduation Requirement Sheet or see a counselor in the Counseling Center.  
 All courses required for a certificate must be completed with a minimum grade of C.