Chaffey College

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.

HOW DO I KNOW 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

WHAT CAN I DO WITH THIS CERTIFICATE/ASSOCIATE DEGREE?
- General Automotive Service Technician
- Automotive Specialty Technician
- Vehicle Salesperson
- Motorcycle Technician
- Automotive Machinist
- Brake Technician
- Service Station Technician
- Marine Service Technician
- Transmission Specialist
- Air-Conditioning Technician
- Engine Performance Technician
- Smog Check Technician
- Master Automotive Technician
- Steering and Suspension Technician
- Fleet Service Technician
- Service Writer

WHERE CAN I WORK?
This pathway provides you with a choice of various work environments including:
- Automotive Repair Shops
- Auto Parts, Accessories, and Tire Stores
- Gasoline Service Stations
- Federal/State Government
- Schools and Colleges
- Manufacturing
- Business Owner
- Smog Check Station
- Fleet Service Facilities

WHAT IS THE POTENTIAL WAGE OUTLOOK?
This Certificate/Associate Degree may lead to a position as an Automotive Service Technician, which according to the EDD/LMID Occupational Employment Statistics Survey, 2017 the median wage in California was $44,241 annually, or $21.27 hourly. For more information, visit www.labormarketinfo.edd.ca.gov/OccGuides.
The job and wage outlook will vary based on the position selected within this major. To review current salary information and job outlook for other occupational titles, visit www.onetonline.org.

WHAT CAN I DO IN THE FUTURE WITH MORE EDUCATION?
The following positions require at least a bachelor’s degree or significant additional experience. According to O*NetOnline, the median salary in 2016 for an Automotive Engineer in California was $98,190 annually.
- Career and Technical Education Teacher
- Automobile Dealers
- Specialty Shops
- Automotive Engineer
- Transportation Manager
- Materials Engineer
- Industrial Designer
- Car Design Engineer
- Store Sales Manager
- District Manager

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 and www.bls.gov.
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.

**Major Requirements for the General Automotive Service Technician Associate in Science Degree:** (S056)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Grade</th>
<th>IP</th>
<th>Need</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>AUTOTEC 450</td>
<td>General Automotive Technician A (or AUTOTEC 10, Service &amp; Repair, 4 and AUTOTEC 417, Brakes, 4 and AUTOTEC 418, Suspension and Steering Systems, 4)</td>
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<tr>
<td>AUTOTEC 455</td>
<td>General Automotive Technician B (or AUTOTEC 15, Auto Electricity and Electronics, 2 and AUTOTEC 416, Basic Auto Air Conditioning Systems, 2 and AUTOTEC 422, Fuel, Ignition, and Emission Control Systems, 5)</td>
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**Requirements for the General Automotive Service Certificate:** (L446)

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

$46 per unit for CA Residents
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.

**Major Requirements for the Master Auto Technician Associate in Science Degree: (S055)**

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Grade</th>
<th>IP</th>
<th>Need</th>
<th>Units</th>
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<tbody>
<tr>
<td>AUTOTEC 423</td>
<td>Engine Management Systems and Drivability</td>
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<tr>
<td>AUTOTEC 427</td>
<td>Engine Operation and Service</td>
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<td></td>
<td>5</td>
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<tr>
<td>AUTOTEC 429</td>
<td>Advanced Automotive Electrical Systems</td>
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<td>4</td>
</tr>
<tr>
<td>AUTOTEC 432</td>
<td>Manual and Automatic Transmissions, Transaxles, and Drive Trains</td>
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<td>5</td>
</tr>
<tr>
<td>AUTOTEC 450</td>
<td>General Automotive Technician A (or AUTOTEC 10, Service &amp; Repair, 4 and AUTOTEC 417, Brakes, 4 and AUTOTEC 418, Suspension and Steering Systems, 4)</td>
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**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-Transcripted*

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<tr>
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<tbody>
<tr>
<td>AUTOTEC 10</td>
<td>Service and Repair</td>
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<tr>
<td>AUTOTEC 15</td>
<td>Automotive Electricity and Electronics</td>
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<tr>
<td>AUTOTEC 407</td>
<td>Introduction to Hybrid Vehicles</td>
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<tr>
<td>AUTOTEC 416</td>
<td>Basic Automotive Air Conditioning Systems</td>
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<tr>
<td>AUTOTEC 429</td>
<td>Advanced Automotive Electrical Systems</td>
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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)

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<thead>
<tr>
<th>Course Code</th>
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<td>AUTOTEC 15</td>
<td>Automotive Electricity and Electronics</td>
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<td>AUTOTEC 422</td>
<td>Fuel, Ignition, and Emission Control Systems</td>
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<tr>
<td>AUTOTEC 423</td>
<td>Engine Management Systems and Drivability</td>
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<tr>
<td>AUTOTEC 429</td>
<td>Advanced Automotive Electrical Systems</td>
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<tr>
<td>AUTOTEC 443</td>
<td>Engine and Emission Control Training Level I</td>
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Engine Rebuilding Certificate
The Engine Rebuilding Certificate prepares students for employment as an automotive machinist.

Requirements for the Engine Rebuilding Certificate: (L449)

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<tr>
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<th>Grade</th>
<th>IP</th>
<th>Need</th>
<th>Units</th>
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<tbody>
<tr>
<td>AUTOTEC 430</td>
<td>Engine Rebuilding-Upper Engine</td>
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<tr>
<td>AUTOTEC 431</td>
<td>Engine Rebuilding-Lower Engine</td>
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High Performance Engines
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-Transcripted

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<td>Engine Rebuilding-Lower Engine</td>
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<tr>
<td>AUTOTEC 435</td>
<td>High Performance Engine Building and Blueprinting</td>
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