

# AUTOMOTIVE TECHNOLOGY

## Certificate of Achievement

Career/Technical (Major Code: 02871)

Designed to study all major vehicle systems, emphasizing on power train, chassis, and electrical systems. Completion of this program will prepare students for all 8 ASE technician certification, and employment as "General Repair Technicians" in independent, franchise, or new car dealerships.

## Program Student Learning Outcome

- The students will inspect diagnose and repair automotive components.

## Gainful Employment

The U.S. Department of Education requires colleges to disclose a variety of information for any financial aid eligible program that "prepares students for gainful employment in a recognized occupation."

Students who complete this program will have acquired the necessary analytical tools to successfully secure gainful employment in the field of study.

For more information regarding the data provided for this program and what it means to you as a student, please feel free to visit our SWC Gainful Employment website at: [www.swccd.edu/gainfulemployment](http://www.swccd.edu/gainfulemployment) (<http://www.swccd.edu/gainfulemployment/>).

First Semester		Units
AT 101	INTRODUCTION TO BASIC AUTOMOTIVE SERVICE	3
AT 102	AUTOMOTIVE SCIENCE AND BASIC MECHANICS	3
AT 109	AUTOMOTIVE BRAKING SYSTEMS	3
AT 110	AUTOMOTIVE SUSPENSION, ALIGNMENT, AND STEERING	3
<b>Units</b>		<b>12</b>
Second Semester		Units
AT 120	ENGINE PERFORMANCE I	3
AT 130	AUTOMOTIVE BASIC ELECTRICAL SYSTEMS	3
AT 131	AUTOMOTIVE HEATING, COOLING, AND AIR CONDITIONING	3
AT 140	ENGINE REPAIR	3
<b>Units</b>		<b>12</b>
Third Semester		Units
AT 220	ENGINE PERFORMANCE II	3
AT 230	AUTOMOTIVE ADVANCED ELECTRICAL SYSTEMS	3
AT 234	AUTOMATIC TRANSMISSIONS AND TRANSAXLES	3
AT 236	MANUAL TRANSMISSION, TRANSAXLES, AND FINAL DRIVES	3
AT 242	CLEAN AIR CAR	3

AT 247	AUTOMOTIVE EMISSION SYSTEMS AND COMPUTERIZED ENGINE CONTROLS	3
<b>Units</b>		<b>18</b>
<b>Total Units</b>		<b>42</b>

Code	Title	Units
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**Optional Coursework: The following courses are not required for the certificate; however, students wishing to work in the Automotive Technology industry are encouraged to take a work experience course.**

AT 290	COOPERATIVE WORK EXPERIENCE IN AUTOMOTIVE TECHNOLOGY I	2
AT 291	COOPERATIVE WORK EXPERIENCE IN AUTOMOTIVE TECHNOLOGY II	2
AT 292	COOPERATIVE WORK EXPERIENCE IN AUTOMOTIVE TECHNOLOGY III	2
AT 293	COOPERATIVE WORK EXPERIENCE IN AUTOMOTIVE TECHNOLOGY IV	2

Code	Title	Units
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### ASE Certification Areas

#### ASE Brakes Certification

AT 109	AUTOMOTIVE BRAKING SYSTEMS
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#### ASE Suspension Certification

AT 110	AUTOMOTIVE SUSPENSION, ALIGNMENT, AND STEERING
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#### ASE Engine Performance Certification

AT 120 & AT 220	ENGINE PERFORMANCE I and ENGINE PERFORMANCE II
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#### ASE Automotive Heating, Cooling, and Air Conditioning Certification

AT 131	AUTOMOTIVE HEATING, COOLING, AND AIR CONDITIONING
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#### ASE Electrical Systems Certification

AT 130 & AT 230	AUTOMOTIVE BASIC ELECTRICAL SYSTEMS and AUTOMOTIVE ADVANCED ELECTRICAL SYSTEMS
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#### ASE Engine Repair Certification

AT 140	ENGINE REPAIR
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#### ASE Automotive Transmissions Certification

AT 234	AUTOMATIC TRANSMISSIONS AND TRANSAXLES
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#### ASE Manual Transmissions Certification

AT 236	MANUAL TRANSMISSION, TRANSAXLES, AND FINAL DRIVES
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Certificates of Course Achievement are offered in the following areas: Clean Air Car—AT 242 and Automotive Emission Systems and Computerized Engine Controls—AT 247.