

## Automotive Technology – Automotive Service Technology Option

The Automotive Service Technology curriculum leads to an Associate in Applied Science (A.A.S.) degree. The automotive industry has undergone a parts and service revolution. The increased complexity of the modern automobile has created a demand for highly skilled, technologically advanced automotive professionals.

The Automotive Service Technology Option prepares students to work as mechanics, safety inspectors and shop supervisors. The skills courses provide experience with the most modern diagnostic and repair equipment. The general education courses are transferable to some baccalaureate degree programs in engineering and vocational education. Graduates are also prepared to take the National Institute of Automotive Service Excellence Certification examinations. This program is certified by the National Automotive Technicians Education Foundation (NATEF).

### STUDENT LEARNING OUTCOMES:

Upon completion of this program graduates will be able to:

- Apply a basic foundation in theory, maintenance, diagnosis and repair of automotive systems.
- Integrate and analyze online service data, written repair material and technical service bulletins to repair and service a vehicle.
- Demonstrate proficiency in the use of specialized automotive service tools, electronic diagnostic equipment and basic hand tools.
- Demonstrate ethical behavior, professionalism and the ability to work as a team.
- Obtain Pennsylvania state emissions and mechanical safety licenses.
- Achieve ASE certifications in all eight automotive service areas.
- Obtain employment in the automotive service industry.

### OPTION ENTRY REQUIREMENTS:

Students interested in automotive fields may enroll in this curriculum. Students must take College placement tests prior to or at the time of entry in order to receive correct course placement. If needed, students must complete developmental work in English and mathematics as part of their degree program.

### PROGRAM OF STUDY AND GRADUATION REQUIREMENTS:

To qualify for the A.A.S. degree in Automotive Service Technology, a student

must complete a minimum of 62 credits as prescribed and attain a grade point average of 2.0 (“C” average).

## AUTOMOTIVE TECHNOLOGY – AUTOMOTIVE SERVICE TECHNOLOGY OPTION

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
<b>FIRST SEMESTER</b>			
AT 100 – Introduction to Automotive Technology		2	
AT 111 – Automotive Steering and Suspension	AT 100	4	
AT 121 – Automotive Electricity and Electronics	AT 100	3	
AT 181 – Automotive Engine Mechanical Repair	AT 100	4	
ENGL 101 – English Composition I		3	ENGL 101
<b>SECOND SEMESTER</b>			
CIS 103 – PC Applications		3	Tech Comp
AT 131 – Automotive Manual Transmissions	AT100	4	
AT 150 – Automotive Braking Systems	AT100, AT121	2	
MATH 118 – Intermediate Algebra		3	Mathematics
ENGL 102 – English Composition II	ENGL 101	3	ENGL 102, Info Lit
<b>Summer Session II</b>			
AT 221 – Advanced Automotive Electrical Systems	AT 121, MATH 118	4	
<b>THIRD SEMESTER</b>			
AT 250 – Advance Braking Systems and Controls	AT150	2	
AT 261 – Engine Performance and Diagnosis	AT 221, MATH 118	4	
AT 271 – Air Conditioning and Heating Systems	AT 121	3	
Social Science Elective		3	
PHYS105 – Survey of Physics or		4	Natural Science
STS 101 – Intro to Science, Technology and Society			
or CHEM 101 – General Chemistry			
<b>FOURTH SEMESTER</b>			
AT 241 – Automatic Transmissions and Transaxles	AT 221, AT 131	4	
AT 281 – Advanced Engine Performance and Diagnosis	AT 261	4	
Humanities or History Elective		3	Humanities
AT 289 – Automotive Technology Internship*	AT 111,121,181, 250, 261, 271 and DH approval	2	
<b>MINIMUM CREDITS NEEDED TO GRADUATE</b>		<b>62</b>	

### General Education Requirements

All General Education requirements are met through required courses (as indicated above) except for the Writing Intensive requirement, the Interpretive Studies requirement and the American/Global Diversity requirement. Therefore, in order to graduate, students in this program must choose one course that is designated Writing Intensive, one course that is designated Interpretive Studies and one course that is designated American/Global Diversity. The same course may be used to fulfill more than one of these requirements. A list of courses that fulfill these requirements and a more detailed explanation of the College’s general education requirements appear elsewhere in this Catalog and on [www.ccp.edu](http://www.ccp.edu).

\* This course is highly recommended but not required for graduation.

### For More Information Contact:

The Division of Business and Technology, Room C1-9, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 496-6164; or the College Information Center (215) 751-8010.