

## AUTOMOTIVE TECHNOLOGY

### Associate in Applied Science Degree | Career Program Department of Engineering, Physics and Technology

The Automotive Technology curriculum, the only one of its kind in the City University of New York, prepares the student for a career as an automotive technician. This curriculum develops understanding of operational principles, service sequences and diagnostic techniques for the automobile. Upon completion of this curriculum, the graduate is prepared for entry-level positions in various areas of the automotive industry dealing with development, testing, diagnosis and service of mechanical, hydraulic, electrical and thermodynamic automotive systems.

Automotive Technology graduates are employed in a variety of automotive-oriented positions including test technician, diagnostician, equipment sales and service, independent business administrator, dealership service manager, service writer, engine machinist, fuel injection, automatic transmission and engine management specialist, as well as general service technician. Further training and education can lead to careers in technical education, engineering, insurance appraisal, accident investigation and other specialties. The program articulates with SUNY Empire State College. See the Transfer Planning web site for more information.

Curriculum Coordinator: Mr. Clement Drummond

### AUTOMOTIVE TECHNOLOGY CURRICULUM (PATHWAYS)

60 Credits required for AAS Degree

#### Required Core

##### A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric *OR* ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)

##### C. Life and Physical Sciences

- CHM 11 General Chemistry I *OR* CHM 17 Fundamentals of General Chemistry I (4 Credits)

#### Flexible Core

##### A. World Cultures and Global Issues

- HIS 10 History of the Modern World *OR*  
HIS 11 Introduction to the Modern World (3 Credits)

##### D. Individual and Society

- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)

##### E. Scientific World

- PHY 11 College Physics I (4 Credits)

A-D. 3 credits of Humanities Restricted Electives must be selected to fulfill Pathways Flexible Core requirements. Choose courses from Flexible Core Areas A through D.

**SUBTOTAL 23**

#### Major Requirements

- ACS 10 Introduction to Automotive Technology (1 Credits)
- ACS 11 Engine Repair (4 Credits)
- ACS 12 Brake Systems (3 Credits)
- ACS 22 Automatic Transmission and Transaxle (4 Credits)
- ACS 23 Heating and Air-Conditioning (3 Credits)
- ACS 24 Electrical Systems (3 Credits)
- ACS 35 Alternate Fuel Systems *OR*  
ACS 36 Hybrid / Electric Vehicles (3 Credits)
- ART 10 Art Survey *OR* MUS 10 Music Survey (1 Credit)
- ELC 15 Computer Applications in Technology (2 Credits)
- MTH 13 Trigonometry and College Algebra (3 Credits)
- PEA Physical Education Activity Course *OR*  
WFA 10 Workplace First Aid (1 Credit)

#### Automotive Technology Option Requirements

- ACS 13 Engine Performance (3 Credits)
- ACS 14 Manual Drive Train and Axle (3 Credits)
- ACS 21 Steering and Suspension Systems (3 Credits)

#### Diesel Technology Option Requirements

- ACS 45 Diesel Technology (3 Credits)
- ACS 46 Diesel Engine Performance (3 Credits)
- ACS 47 Air Brakes and Suspension (3 Credits)

**SUBTOTAL 37**