

AUTOMOTIVE TECHNOLOGY PROGRAM

Pathway Description

The automotive industry is quickly evolving and the need for highly-skilled automotive professionals is at the forefront of this new era of mobility. Automotive Technology is designed to meet the ongoing demand for trained, certified Automotive Technicians. This program offers hands-on training to repair and maintain the mechanical and electronic systems on-board today's vehicles.

Our Automotive Technology program includes high tech training in the following areas: suspension and steering, brakes, electrical/electronic systems, engine performance, engine repair, automatic transmission, transaxle, manual drive train and axles, and heating and air conditioning. Additionally, students are introduced to the workings of computer diagnostics as they relate to modernized transmission systems. These areas combine to give the students an exposure to the entire field. Students will work on vehicles using state of the art equipment in their performance of routine maintenance, and diagnosis and repair.

Our program is certified by the National Automotive Technicians Education Foundation (NATEF). Automotive Technology prepares students to take the Automotive Service Excellence (ASE) Certification Test to gain an entry level position in the field. Students will also have the skills and training to move into higher levels of training for more specialized positions.

AUTOMOTIVE TECHNOLOGY PROGRAM

Course Sequence

CORE	GRADE 9	GRADE 10	GRADE 11	GRADE 12
ENGLISH	ENGLISH I	ENGLISH II	ENGLISH III OR AP LANGUAGE/COMP	ENGLISH IV OR AP LITERATURE/COMP
SOCIAL STUDIES	WORLD HISTORY	US HISTORY I OR PRE AP US HISTORY I	US HISTORY II OR AP US HISTORY II	AP HISTORY OR SS ELECTIVE OR INTERNSHIP
MATHEMATICS	ALGEBRA I OR GEOMETRY	GEOMETRY OR ALGEBRA II	ALGEBRA II OR PRECALCULUS	PRECALCULUS OR AP CALCULUS AB/BC OR MATH ELECTIVE OR INTERNSHIP
SCIENCE	BIOLOGY	CHEMISTRY	PHYSICS OR AP PHYSICS I	AP SCIENCE OR SCIENCE ELECTIVE OR INTERNSHIP
HEALTH/PHYSICAL EDUCATION	FITNESS AND HEALTH I	FITNESS AND HEALTH II	FITNESS AND HEALTH III	FITNESS AND HEALTH IV
CTE MAJOR	CTE SEMINAR/FINANCIAL LITERACY	AUTOMOTIVE TECHNOLOGY I	AUTOMOTIVE TECHNOLOGY II	AUTOMOTIVE TECHNOLOGY III
INTERDISCIPLINARY STUDIES	GRAPHIC DESIGN	AUTOMOTIVE TECHNOLOGY I	AUTOMOTIVE TECHNOLOGY II	AUTOMOTIVE TECHNOLOGY III
WORLD LANGUAGE/ELECTIVES	SPANISH I	SPANISH II	SPANISH III OR ELECTIVE	AP SPANISH OR ELECTIVE

Automotive Technology Program
Course Credits

Freshman

English I	5 credits
World History	5 credits
Algebra I or Geometry	5 credits
Biology	5 credits
Spanish I	5 credits
Fitness and Health I	5 credits
Graphic Design	5 credits
CTE Seminar/Financial Literacy	5 credits

Sophomore

English II	5 credits
US History I or Pre-AP US History I	5 credits
Geometry or Algebra II	5 credits
Chemistry	5 credits
Spanish II	5 credits
Fitness and Health II	5 credits
Automotive Technology I	10 credits

Junior

English III or AP Language/Comp	5 credits
US History II or AP US History II	5 credits
Algebra II or Pre-calculus	5 credits
Physics or AP Physics I	5 credits
Spanish III or Elective	5 credits
Fitness and Health III	5 credits
Automotive Technology II	10 credits

Senior

English IV or AP Literature/Comp	5 credits
AP History or SS Elective or Internship	5 credits
Pre-calculus or AP Calculus AB/BC or Math Elective or Internship	5 credits
AP Science or Science Elective or Internship	5 credits
AP Spanish or Elective	5 credits
Fitness and Health IV	5 credits
Automotive Technology III	10 credits

Automotive Technology Program
Course Descriptions

Course Title: Career and Technical Education Seminar

Grade Level: 9

Credits: 5

This course was designed to assist in the transition of students from middle school to high school and to introduce them to the multiple career pathways in their chosen CTE program. The course will serve as an introduction to CCTEC and will provide academic, social, and emotional support to our incoming freshmen. The primary focus of the course will be the development of critical skills pertaining to: studying, personal finance, career exploration, and the exploration of character traits that are vital for academic success. Students will actively participate in projects that promote cooperative learning, community involvement, problem solving, and character education. Students will also be introduced to their CTE program and complete projects in their chosen CTE field.

Course Title: Automotive Technology I

Grade Level: 10

Credits: 10

Automotive Technology I is an intense course that provides instruction in both automotive mechanical and electronic systems. As a first year student in Automotive Technology, classes will focus on the structure of automobiles as well as their functionality. Students will be given a hands-on approach to the different topics covered. The curriculum is designed to prepare students for a career opportunity in the automotive field. The course instruction includes specialized training in the following areas: Heating and Air Conditioning, Brake Systems, and Engine Repair. Social skills are also embedded into the curriculum; the students will develop personal growth, as well as the necessary attitudes and skills needed for seeking employment. The purpose of the program is to ensure students are eligible to successfully complete the ASE certification exams.

Course Title: Automotive Technology II**Grade Level: 11****Credits: 10**

Automotive Technology II is an extension of Automotive Technology I. As before, the course provides instruction in both automotive mechanical and electronic systems. As a second year student in Automotive Technology, classes will focus on both automotive mechanical and electronic systems. Students will be given a hands-on approach to the different topics covered and will be given the opportunity to pick apart an automobile and put it back together. The curriculum is designed to prepare students for a career opportunity in the automotive field. The course instruction includes specialized training in the following areas: Steering and Suspension, Manual Drive Train Axles, and Automatic and Manual Transmission. The purpose of the program is to ensure students are eligible to successfully complete the ASE certification exams.

Course Title: Automotive Technology III**Grade Level: 12****Credits: 10**

Automotive Technology III is an extension of Automotive Technology II. As before, the course provides instruction in both automotive mechanical and electronic systems. As a third year student in Automotive Technology, classes will focus on both automotive mechanical and electronic systems. Students will be given a hands-on approach to the different topics covered and will be given the opportunity to pick apart an automobile and put it back together. The curriculum is designed to prepare students for a career opportunity in the automotive field. The course instruction includes specialized training in the following areas: Engine Performance and Electronic and Electrical Systems. The purpose of the program is to ensure students are eligible to successfully complete the ASE certification exams.