AUTOMOTIVE TECHNOLOGY (AUTI)

IvyTech.edu/automotive-technology

OVERVIEW

The Automotive Technology program offers exciting careers and unlimited opportunities. Through the use of equipment used in the automotive industry today and ASE master certified instructors, students learn how to diagnose and repair today's high-tech vehicles. This program will prepare students for entry level employment with companies that require training in areas such as: electrical systems, engine performance, transmissions, brakes, steering and suspension systems, air conditioning systems, and engine repair. Students are prepared to take industry standard certification exams from ASE. Students receive hands-on experience on up to date repair and diagnostic equipment that is currently used in the automotive field today. Computer usage and skills along with network communication diagnosis has become critical skills required to quickly and accurately diagnosis newer automobiles, hybrid and alternative fueled vehicles, and heavy diesel trucks. This is a hands-on training program that allows plenty of lab time to develop the skills needed to be successful in whichever emphasis of study the student chooses to go into. Through your choice of electives, you can choose the emphasis of study you would like to pursue.

TWO-YEAR PROGRAM OPTIONS

ASSOCIATE OF APPLIED SCIENCE
AUTOMOTIVE TECHNOLOGY

(60 credit hours = 5 semesters)

The Associate of Applied Science (AAS) degree in Automotive Technology will give you the knowledge and skills for career entry or advancement in a current job. Associate of Applied Science degree programs are two-year programs that prepare students for careers, career changes and career advancement. These programs offer education in recognized technical areas and specialties with emphasis on analysis, synthesis and evaluation. The program content, which is approximately 30% general education and 70% professional/technical, provides depth and breadth in conceptual and professional/technical skills. The general education courses equip students with the problem solving, communications, scientific and mathematical skills to compete successfully in the job market. Professional/technical courses equip students with the skills to obtain employment and to advance in the workforce.

ONE-YEAR OR LESS PROGRAM OPTIONS

CERTIFICATES OFFERED

Advanced Diesel Electronics (18 credit hours= 2 semesters)
Alternative Fuels (21 credit hours = 2 semesters)
Electric and Hybrid Vehicle (24 credit hours = 2 semesters)
Maintenance and Light Repair (18 credit hours = 2 semesters)

TECHNICAL CERTIFICATES OFFERED

Automotive Service (34 credit hours = 2-3 semesters)

CERTIFICATE IN ADVANCED DIESEL ELECTRONICS

Course #	Title	Credit Hours
AUTI 111	Electrical 1	3
TRCK 100	HD Truck Prevantative Maitenance	3
TRCK 127	Engine Repair	3
TRCK 219	Diesel Engine Performance	3
TRCK 224	HT Electrical Systems	3
TRCK 234	Advanced Diesel Emissions Controls	3

Total Credit Hours: 18

CERTIFICATE IN MAINTENANCE AND LIGHT REPAIR

Course #	Title	Credit Hours
AUTI 100	Basic Automotive Service	3
AUTI 111	Electrical Systems 1	3
AUTI 121	Brake Systems	3
AUTI 122	Steering & Suspension Systems	3
AUTI 131	Engine Performance Systems I	3
AUTI 145	Driveline Service	3

Total Credit Hours: 18

CERTIFICATE IN ELECTRIC HYBRID VEHICLE TECHNOLOGY

Course #	Title	Credit Hours
ALTF 103	Principles of Alternative/Renewable Energies	3
AUTI 100	Basic Automotive Service	3
AUTI 111	Electrical Systems 1	3
AUTI 112	Electrical Systems II	3
AUTI 131	Engine Performance Systems I	3
AUTI 141	Engine Fundamentals and Repair	3
AUTI 210	Electric & Hybrid Vehicle Technologies	3
AUTI 260	Advanced Hybrid Vehicle & Electric Technologies	3

Total Credit Hours: 24

CERTIFICATE IN ALTERNATIVE FUELS TECHNOLOGY

Course #	Title	Credit Hours
ALTF 103	Principles of Alternative/Renewable Energies	3
ALTF 104	Liquid Propane Gas I	3
ALTF 106	Compressed Natural Gas	3
ALTF 211	Alternative Fuels Installation & Application	3
AUTI 100	Basic Automotive Service	3
AUTI 141	Engine Fundamentals & Repair	3
TRCK 127	Engine Repair	3

Total Credit Hours: 21

IF YOU'VE GOT QUESTIONS, WE'VE GOT ANSWERS.
FOR MORE INFORMATION:

School Advanced Manufacturing, Engineering & Applied Science
765.269.5229

IVY TECH COMMUNITY COLLEGE

Ivy Tech Community College-Lafayette

Automotive Technology

2018-2019

THE FOLLOWING SUGGESTED REGIONAL SEQUENCE INCLUDES ALL COURSE REQUIREMENTS FOR THIS DEGREE. YOU MUST CONSULT WITH AN ACADEMIC ADVISOR TO DETERMINE WHICH ELECTIVES BEST MEET YOUR CAREER GOALS.

TECHNICAL CERTIFICATE IN AUTOMOTIVE SERVICE

Semester 1

Course #	Title	Credits
AUTI 100	Basic Automotive Service	3
AUTI 111	Electrical Systems I	3
AUTI 121	Brake Systems	3
IVYT 113	Student Success in Technology	3
COMM 104	Workplace Communications	3

Semester 2

AUTI 122	Steering & Suspension Systems	3
AUTI 131	Engine Performance Systems I	3
AUTI 141	Engine Repair	3
AUTI 142	Climate Control Systems	3
AUTI 145	Driveline Service	3

Semester 3

AUTI 132	Engine Performance Systems II	3
AUTI 112	Electrical Systems II	3

Total Credit Hours: 34

ASSOCIATE OF APPLIED SCIENCE IN AUTOMOTIVE TECHNOLOGY

Semester 1
TECHNICAL CERTIFICATE

Semester 2

Course #	Title	Credits
MATH 122	Technical Mathematics	3
XXXX XXX	Automotive Technology Statewide Elective	3
XXXX XXX	Automotive Technology Statewide Elective	3
XXXX XXX	Humanities Elective	3

Semester 3

Course #	Title	Credits
^ AUTI 279	Automotive Capstone	2
ENGL 111	English Composition	3
XXXX XXX	Automotive Technology Statewide Elective	3
XXXX XXX	Automotive Technology Statewide Elective	3

Select one of the following courses: **3-4**

SCIN 101	Science of Traditional & Alternative Energy
SCIN 111	Physical Science
BIOL 101	Introductory Biology
SCIN 100	Earth Science
CHEM 101	Introductory Chemistry

Total Credit Hours: 60

AUTOMOTIVE TECHNOLOGY STATEWIDE ELECTIVES - LAFAYETTE

ACCT	101	Financial Accounting
ALTF	103	Principles of Alternat./Renewable Energies
ALTF	104	Liquid Propane Gas I
ALTF	106	Compressed Natural Gas I
ALTF	112	Liquid Propane Gas II
ALTF	114	Compressed Natural Gas II
ALTF	211	Alternative Fuels Installation and Application
AUTI	210	Electric and Hybrid Vehicle Technologies
AUTI	221	Vehicle Diagnosis and Service
AUTI	224	Advanced Chassis Systems
AUTI	229	Drive ability Diagnosis
AUTI	234	Engine Performance III
AUTI	243	Electrical and Electronics III
AUTI	250	Manual Transmissions
AUTI	251	Automatic Transmission I
AUTI	252	Automatic Transmission II
AUTI	260	Adv. Hybrid & Electric Vehicle Technologies
AUTI	261	Dynamometer Testing and Analysis
AUTI	280	Co-op/Internship
AUTI	299	Special Topics
BUSN	101	Introduction to Business
BUSN	105	Principles of Management
CINS	101	Introduction to Computers
INDT	104	Fluid Power Basics
INDT	114	Introduction to Welding
MKTG	101	Principles of Marketing
TRCK	100	Diesel Preventive Maintenance
TRCK	125	Manual Transmission/Differential
TRCK	127	Engine Repair
TRCK	219	Diesel Engine Performance
TRCK	224	HT Electrical Systems
TRCK	234	Advanced Diesel Emissions Controls
WELD	208	Gas Tungsten Arc (TIG) Welding

FOR MORE INFORMATION:

Jason Allen
Program Chair
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765-269-5932

SUBARU UNIVERSITY

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Symbol Key
^ Capstone Course