

COURSE NUMBER: 1600
COURSE TITLE: Fundamentals of Auto
(W.I.T.C.C. Program: Automotive Technology)
COURSE LENGTH: Year - 90 Minute Time Block Daily
High School - 4 Credits
Western Iowa Tech Community College - Up to 10 Credits if both semesters are taken.

PREREQUISITE: Power and Energy

GRADE LEVEL: 11, 12

LOCATION: Auto Tech Center

CREDITS EARNED: AUT 1214 Automotive Technology (4 SEM CRS)
AUT 1215 Automotive Electricity/Electronics (4 SEM CRS)

COURSE DESCRIPTION:

This is a Dual Credit course taught by WITCC. The first semester of this course is designed to provide basic instruction in shop skills including precision measuring, hand tool use, power tool use, fittings, fasteners, and related shop equipment. Basic electronic fundamentals of electricity to include series, parallel & series parallel circuits, use of ohms law, basic operation of batteries ignition systems, and charging systems also covered is competent identification, fundamental operating principles, theory and design in the basics of gasoline and diesel engines. Shop safety practices in each area of study will be emphasized. The lab portion of this course is designed to give the student the opportunity to apply the knowledge gained in the lecture setting by working on related components in the laboratory atmosphere.

The second semester is designed to be a continuation of the first semester. Areas of study include basics of electrical systems, vehicle maintenance procedures. Shop safety practices in each area of study will be emphasized. The lab portion of this course is designed to give the student the opportunity to apply the knowledge gained in the lecture setting by working on related components in the laboratory atmosphere. The basics of electrical systems will include starting systems. Basic engine designs and principles will include disassembly and reassembly. A study of fuel systems, gasoline and diesel, carburetors and fuel injection systems, and basic trouble shooting procedures.

College classes held at the WITCC campus and the Auto Tech Center will follow the WITCC calendar. This means that inservice days and early dismissals for inservice and holidays will be different than the Denison High calendar.

* College Credits earned apply to taking the full year of classes

** See WITCC College Catalog for Course Descriptions, Program Overview, Career Outlook, and Program Outcomes.

