ELECTRONIC ENGINEERING TECHNOLOGY

EET 1035C, AC/DC Circuits AC/DC Circuits
4 hrs., 3 crs.,
$60.00 lab fee. (Offered spring). Prerequisite: EET1084C, ETI2001C. This integrated lecture/lab course continues the study of AC and DC circuits beyond Introductory Electronics. Topics include current, voltage, resistance, and power in series, parallel, and combination DC circuits. Capacitance, inductance, resonance, and power will be covered in AC circuits. Network theorems, filters, networks, and transformers will also be covered. The lab portion develops skills in fabricating circuits, reading schematic diagrams, measuring circuit parameters, and troubleshooting circuit faults. Student will use basic testing equipment such as the digital multimeter, function generator, and power sources. Computer simulation software is used to predict voltages and currents in various circuits and to verify results through hands-on experimentation.

EET 1084C, Introduction to Electronics Introduction to Electronics
4 hrs., 3 crs.,
$50.00 lab fee (Offered fall and spring). Introduction to the principles of electricity, magnetism, and basic laws. Includes fundamentals of analog and digital electronic components and circuits, including applications. Laboratory exercises will consist of experiments with basic circuits and test equipment, as well as an introduction to mobile robotics.

EET 1140C, Electronic Devices and Circuits Electronic Devices and Circuits
4 hrs., 3 crs.,
$57.00 lab fee (Offered fall). Prerequisite: EET1035C. Integrated lecture and laboratory experiences in the study of semiconductor devices and their application in electronic circuits. Included is the study of the structure of matter, diodes, transistors, biasing, FETs, PNPNs, single stage amplifiers, and other devices. Study of power supplies, oscillators, and amplifiers using discrete components and operational amplifiers are included. Design of these circuits, frequency response, stabilization, and feedback will be considered.

EET 2214C, LabVIEW Instrumentation LabVIEW Instrumentation
5 hrs., 3 crs.,
This course teaches programming concepts, techniques, features, virtual instrumentation, and functions used to create test and measurement, data acquisition, instrument control, datalogging, measurement analysis, and report generation applications. Experience is also gained in writing algorithms in the form of flow charts and block diagrams.

EET 2355C, Digital Communications Digital Communications
5 hrs., 3 crs.,
Prerequisite: EET1140C, CET1112C. Lecture/laboratory experiences in the study of electronic communications, including digital RF transmissions and analysis, microwave, fiber-optic, and laser communications. Study of coding, transmission, and decoding of pulse transmission systems, error detection, and troubleshooting techniques.

EET 2931, Special Projects in Electronics Special Projects in Electronics
3 hrs., 3 crs.,
Course centering around topics of current interest or of special interest to students or instructors. Students have the opportunity to research, design, and prototype new projects. Topics or focus may vary from semester to semester. The course can be repeated up to two times.

EET 2949, COOP/Work Experience/Electronics COOP/Work Experience/Electronics
1 hr., 1 cr.,
1-3 crs. Cooperative Education courses may be taken toward completion of most of the Associate in Arts and Associate in Science degree programs. A maximum of six credit hours may be used in meeting the A.A. degree requirements. Prerequisite: Minimum of 2.0 GPA, meet with the co-op coordinator, and availability of co-op work experience slot. Supervised, practical work experience that seeks to combine theories and apply practical skills to projects in the student?s major field of study. Requirements include online weekly, mid-term, and end-of-term reflection assignments.