ELECTRONICS ENGINEERING TECHNOLOGY (EET)

EET 111 Circuit Analysis I (3 Credits)
Introduction to direct current circuits with emphasis on voltage, current, resistance, Ohm's Law, energy and power. Series, parallel, and series-parallel circuits, voltage and current dividers, and Kirchhoff's Law are studied, as well as DC network analysis, network theorem and magnetism circuits.

EET 111L Circuit Analysis I Laboratory (1 Credits)
Introduction to "live" and computer simulated experiments in DC theory with emphasis on breadboarding electric circuits, using meters, and using electronic simulation software. (Meets 3 hours per week.)

EET 212 Circuit Analysis II (3 Credits)
Study of alternating current circuits, with emphasis on alternating current and voltage capacitors, RC circuits, inductors, RL circuits, resonance, AC network analysis, network theorem and transformers.

EET 212L Circuit Analysis II Laboratory (1 Credits)
Introduction to "live" and computer simulated experiments in AC theory with emphasis on breadboarding electric circuits, using meters and electronic simulation software. Develops skills in measuring AC circuit parameters. (Meets 3 hours per week.)

EET 213 Electronic Devices I (3 Credits)
Examination of semiconductor junction devices, with emphasis on characteristics and operation of diodes, bipolar junction transistors and field-effect transistors, DC characteristics biasing, and DC stability.

EET 213L Electronic Devices I Laboratory (1 Credits)
Experiments with semiconductor junction devices, with emphasis on characteristics and operation of diodes, bipolar junction transistors and field-effect transistors, DC characteristics, biasing, and DC stability.

EET 220 Digital Electronics (3 Credits)
Study of digital devices and circuits, logic devices, integrated circuits, binary, and hexadecimal.

EET 220L Digital Electronics Laboratory (1 Credits)
Experiments on logic circuits, integrated circuits and microprocessors, circuit and device troubleshooting and analysis. (Meets 3 hours per week.)

EET 313 Electronic Devices II (3 Credits)
Examination of power amplifiers, operational amplifiers, active filters, oscillators, communications circuits, voltage regulators, and other semiconductor devices.

EET 313L Electronic Devices II Laboratory (1 Credits)
Experiments with power amplifiers, operational amplifiers, active filters, oscillators, communications circuits, voltage regulators, and other semiconductor devices.

EET 314 Instrumentation Measurement & Control (3 Credits)
Study of the characteristics and limitations of instrumentation, measurement and control systems. Emphasis is on measurement systems, including transducers, signal conditioners, and telemetry systems. Various types of control systems are also addressed including on-off, proportional, derivative, PID and fuzzy logic. Programmable logic devices are also introduced.

EET 315 Analog Communication Systems (3 Credits)
Introduction to analog communications technology, with emphasis on theory, operation, design of radio frequency amplifiers and receivers mixers, oscillators, coupling circuits, transmitters, propagation, antennas and sidebands.

EET 315L Analog Communication Systems Laboratory (1 Credits)
This is the lab component of EET 315. Emphasis is on measurement and analysis of communications signals and evaluation of communication systems.

EET 413 Digital Communications Systems (3 Credits)
Theory of communications systems utilizing digital signals. Includes coding, multiplexing, digital modulation, information codes, and error detection codes.

EET 413L Digital Communications Systems Lab (1 Credits)
This course is the laboratory component for EET 413 lecture. Students will design, build, and troubleshoot such circuits and systems as modulators, transceivers, line coders, multiplexers, fiber optics and data acquisition systems.

EET 497L Sr Project A: Capstone Experience I (1 Credits)
This is the first of a two-course capstone experience. Students will develop a career portfolio, review soft skills, and gain approval for a formal proposal for a senior project. The project will be completed in the second course in the sequence.

EET 498L Sr Project B: Capstone Experience II (1 Credits)
This is the second of a two-course capstone experience. Students will build the project approved in the first course and complete their project with the requirement of project presentation.