

ECET 2210L: Digital II Lab

1 Credit Hours

Concurrent: ECET 2210

The laboratory component of ECET 2210 is designed to provide the student with hands-on experience in the fundamental concepts and techniques of microcontroller system design. The concepts are extended into assembly programming language. Lab exercises are based on modern microcontroller embedded design principles and practices.

ECET 2300: Electronics I

3 Credit Hours

Concurrent: ECET 2111 and MATH 2202

This course is a study of the characteristics, analysis, and practical applications of diodes, bipolar-junction transistors (BJTs), and field-effect transistors (FETs). Semiconductor theory, biasing, and small-signal models of BJTs and FETs are included. An introduction to the ideal op amp and basic circuits using it is included.

ECET 2300L: Electronics I Lab

1 Credit Hours

Concurrent: ECET 2300

This course provides laboratory experiences to complement ECET 2300 Electronics I. Standard devices such as op-amps, diodes, bipolar-junction transistors, and field-effect transistors are employed to construct circuits used to: examine device/circuit behavior, become familiar with associated measurements, and reinforce lecture concepts.

ECET 2310: Electronics II

3 Credit Hours

Prerequisite: ECET 2111 and ECET 2300

This course is a study of bipolar junction transistor (BJT) and field effect transistor (FET) amplifiers including: amplifier frequency response, multistage amps, differential amps, feedback principles, and heat sink principles. The characteristics, performance and, practical applications of modern linear integrated circuits including: operational amplifiers, comparators, multipliers, logarithmic amplifiers, and oscillators are also covered.