

# ESET - Electronics Systems Engineering Technology

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## Courses

### **ESET 220 Microprocessors and Microcontrollers**

**3 Credits. 2 Lecture Hours. 2 Lab Hours.**

A course on designing, programming, and troubleshooting microprocessor systems and applications. Topics include: assembly language programming, interrupt and polled input/output (I/O), interrupt service routines, parallel ports, timer functions, serial interfaces, analog-to-digital (A/D) converters, and external hardware interfaces.

This course is offered online only.

Prerequisites: IT 100 or IT 101, and EET 121

### **ESET 251 Electronics**

**4 Credits. 3 Lecture Hours. 3 Lab Hours.**

A course on semiconductor and amplifier theory and application.

Topics include: diode circuits and basic power supplies; bipolar transistor, field-effect transistor (FET), thyristor, and operational amplifier theory; inverters; circuit construction; and troubleshooting.

Prerequisites: EET 132 (minimum grade C)

Ohio Transfer Assurance Guide Approved

### **ESET 290 Electronic Systems Engineering Technology Capstone Project**

**4 Credits. 2 Lecture Hours. 4 Lab Hours.**

Students design a system using analog and digital electronics concepts, and prepare and deliver a professional presentation of their completed project. Topics include: design theory, feasibility study, engineering economics, and presentation skills.

Prerequisites: EET 122 and ESET 251