

ENGINEERING TECHNOLOGY (ET)

ET 101 **3.0 UNITS****Principles of Engineering Technology**

Class Hours: 2.0 Lecture / 3.0 Laboratory

Total Contact Hours: 36 Lecture / 54 Laboratory

This course introduces the student to principles of engineering technology by the use of activity-based learning, project-based learning, and problem-based learning. The student will learn about the design process, communication and documentation, engineering systems, statics and strength of materials, properties of materials and materials testing, reliability, and kinematics. This course is not open to students who have received credit in EL 102.

Transfer Credit: CSU

ET 102 **3.0 UNITS****Electronics for Engineering Technologists**

Class Hours: 2.0 Lecture / 3.0 Laboratory

Total Contact Hours: 36 Lecture / 54 Laboratory

This course introduces the student to the applications of electronics in engineering technology by the use of activities-based learning, project-based learning, and problem-based learning. The student will learn about safety, Ohm's law, direct current circuits, capacitance, inductance, reactance, impedance, analog and digital waveforms, basic motors, logic gates, flip-flops, shift registers, and micro-controllers. Techniques of troubleshooting will be emphasized using simulation and electrical measurements. This course is not open to students who have received credit in EL 102.

Transfer Credit: CSU

ET 103 **2.0 UNITS****Industrial Process Control**

Class Hours: 2.0 Lecture

Total Contact Hours: 36 Lecture

This course is designed as a survey of process control. It will stress process control for liquid processes. Students will learn how to measure and control flow, pressure, liquid level, and temperature. It will also include an introduction to transducers, transmitters, and control systems.

Transfer Credit: CSU

ET 105 **2.0 UNITS****Industrial Motor Control**

Class Hours: 2.0 Lecture

Total Contact Hours: 36 Lecture

This course is designed as a survey of motor control. It will stress motor control for both Alternative and Direct current circuits. Students will learn how to control relays and manual switches. It will also include an introduction to electronic sensors, counters, and speed control.

Transfer Credit: CSU