

ELECTRONICS ENGINEERING TECHNOLOGY (ELTT)

ELTT1100 | Basic Electricity & Electronics Lab | Laboratory (2 Credits)

Analyze, design, and build series, parallel and combination AC and DC circuits. Build and test semiconductor circuits, power supplies, transistor circuits using protoboards and various test equipment.

ELTT1110 | Basic Electricity & Electronics Lab | Laboratory (5 Credits)

Analyze, design and build series, parallel and combination AC and DC circuits. Semiconductor circuits, power supplies, transistor circuits are built and tested using protoboards and various test equipment.

ELTT1120 | Basic Electricity & Electronics Theory | Lecture (8 Credits)

Identification, recognition and calculations associated with basic electricity, including Ohm's Law, resistance, capacitance, inductance in AC and DC circuits, as well as solid state principles of diodes, power supplies and transistors.

ELTT1200 | Digital & Microprocessors Lab | Laboratory (2 Credits)

Design, build, and troubleshoot digital circuits. Debug and program microprocessors and microcontrollers for various operations and interface to external devices. Analyze digital and microprocessor circuits using industry standard test equipment.

Prerequisite(s): ELTT1120

ELTT1210 | Digital & Microprocessors Lab | Laboratory (3 Credits)

Design, build, and troubleshoot digital circuits. Debug and program microprocessors and microcontrollers for various operations and interface to external devices. Analyze digital and microprocessor circuits using industry standard test equipment.

Prerequisite(s): ELTT1120

ELTT1220 | Digital & Microprocessors Theory | Lecture (8 Credits)

Identification, recognition and calculations associated with combinational and sequential logic circuits as well as internal architecture of microprocessors and microcontrollers, programming, logic operations, memory mapping, addressing, data transfer, and system control.

Prerequisite(s): ELTT1120

ELTT1230 | PCB & Circuit Development | Lecture (1 Credit)

Electronic circuit prototyping using various industry standards, hardware, and software. Utilize circuit manufacturing techniques to create surface mount and through hole circuit boards.

Prerequisite(s): ELTT1120

ELTT1240 | Programming Fundamentals | Lecture (1 Credit)

Use algorithms and flowcharts to develop logic, execution control, data types, loops, and control structures for computer executable software. Utilizes National Instrument's LabVIEW.

Prerequisite(s): ELTT1120

ELTT2200 | Advanced Electronics Lab | Laboratory (2 Credits)

Design and build single and multistage transistor amplifiers, operation amplifier control circuits, thyristors, motors, radio frequency circuits; other advanced electronics topics.

Prerequisite(s): ELTT1120

ELTT2201 | Advanced Electronics Lab | Laboratory (3 Credits)

Design and build single and multistage transistor amplifiers, operation amplifier control circuits, thyristors, motors, radio frequency circuits; other advanced electronics topics.

ELTT2211 | Advanced Electronics Lab | Laboratory (2 Credits)

Design and build single and multistage transistor amplifiers, operation amplifier control circuits, thyristors, motors, radio frequency circuits; other advanced electronics topics.

Prerequisite(s): ELTT1120

ELTT2221 | Advanced Electronics Theory | Lecture (5 Credits)

Identification, recognition and calculations associated with single and multistage transistor amplifiers, operation amplifier control circuits, thyristors, motors, radio frequency circuits; other advanced electronics topics.

Prerequisite(s): ELTT1120

ELTT2230 | Advanced Electronics Theory | Lecture (8 Credits)

Identification, recognition and calculations associated with single and multistage transistor amplifiers, operation amplifier control circuits, thyristors, motors, radio frequency circuits as well as other advanced electronics topics.

Prerequisite(s): ELTT1120