

# ILT 163: Digital Fundamentals

This course provides instruction on basic logic gates, flip-flops, registers, counters, microprocessor/computer fundamentals, analog to digital conversion, and digital analog conversion. Emphasis is placed on number systems, Boolean algebra, combination logic circuits, sequential logic circuits, and typical microprocessor data manipulation and storage. This course also has an embedded lab with exercises designed to develop skills required by industry. Upon completion, students should be able to analyze digital circuits, draw timing diagrams, determine output of combinational and sequential logic circuits and diagnose and troubleshoot electronic components as well as demonstrate knowledge of microprocessor and computer circuits. CORE. As needed.

**Credits:** 3

**Transfer Code:** Code C

**Lab Hours:** 4

**Lecture Hours:** 1

**Program:** Industrial Electronic Technology

**Semester Offered:**

Fall

Spring

Summer