

## AVT 131: Digital Concepts

This course provides instruction in basic logic gates, flip-flops, registers, counters, microprocessor/computer fundamentals, analog-to-digital conversion, and digital-to-analog conversion. Emphasis is placed on number systems, Boolean algebra, combination logic circuits, sequential logic circuits, and typical microprocessor data manipulation and storage. 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.

Credits: 4

Lab Hours: 9

Lecture Hours: 1

Clinical Hours: 0

Prerequisites: **AVT 111 AVT 112**