

# EECE 211: Digital Systems Design

Introduction to hardware building blocks used in digital computers and systems. Introduces number systems (including binary, octal and hexadecimal), Boolean algebra, two-level/multilevel logic minimization/simplification using K-Maps and Quine-McCluskey methods, combinational logic circuit design and implementation with available SSI, MSI, and programmable logic devices (PAL, PLA, multiplexers, encoders, ROMS). Practical considerations such as hazard and glitches are treated. Basics of sequential logic design including latches, flip-flops, registers, counters, finite state machines design, minimization, and implementation are presented.

**Credits:** 3

**Program:**

## Electrical Engineering

### COURSE DESCRIPTIONS