

# ECE 3170: Computer Architecture

Fundamentals of instruction set architecture (ISA) and processor & memory organization. Topics include ISA, arithmetic circuits, register file, single-cycle, multi-cycle, and pipelined microarchitecture, memory operation, cache, virtual memory, parallel architectures.

**Credits:** 3

**Prerequisites:**

ECE 2170

ECE 2172

ECE 2173

ECE 2170 and ECE 2172 and ECE 2173

**Co-Requisites:**

ECE 3171

ECE 3171

**Program:** [Electrical and Computer Engineering](#)