

# CE4304 - Computer Architecture

[CE 4304](#) Computer Architecture (3 semester hours) Introduction to computer organization and design, including the following topics: CPU performance analysis. Instruction set design, illustrated by the MIPS instruction set architecture. Systems-level view of computer arithmetic. Design of the datapath and control for a simple processor. Pipelining. Hierarchical memory. I/O systems. I/O performance analysis. Multiprocessing. Students cannot receive credit for both ([CS 3340](#) or [SE 3340](#) or [TE 3340](#)) and ([CE 4304](#) or [EE 4304](#)). Prerequisite: [CE 3320](#) or [EE 3320](#). (Same as [EE 4304](#)) (3-0) S