Computer Architecture

This course introduces the concepts of computer architecture by going through multiple levels of abstraction, and the numbering systems and their basic computations. It focuses on the instruction-set architecture of the MIPS machine, including MIPS assembly programming, translation between MIPS and C, and between MIPS and machine code. General topics include performance calculation, processor datapath, pipelining, and memory hierarchy. Credit cannot be received for both courses, (CS 3340 or SE 3340 or TE 3340) and (CE 4304 or EE 4304). Prerequisites: (CE 1337 or CS 1337 or TE 1337 with a grade of C or better or equivalent) and (CE 2305 or CS 2305 or TE 2305 with a grade of C or better). (Same as SE 3340 and TE 3340) (3-0) S