ELECTRICAL ENGINEERING (EEE)

EEE120 / Digital Design Fundamentals
4 Credits / 6.0 Periods for Lecture & Lab
Number systems, conversion methods, binary and complement arithmetic, Boolean switching algebra and circuit minimization techniques. Analysis and design of combinational logic, flip-flops, simple counters, registers, ROMs, PLDs, synchronous and asynchronous sequential circuits, and state reduction techniques. Building physical circuits. Prerequisites: None. Corequisites: CSC100 or CSC110 or permission of Instructor or Division or Department Chair.
Crosslisted: CSC120
Fulfills: Computer/Statistics/Quantitative Applications [CS]; Computer/Stats/Quantitative Apps [CS]-in combo
Division: Physical Sciences and Engineering

EEE202 / Circuits and Devices
5 Credits / 3.0 Periods for Laboratory, 4.0 Periods for Lecture
Introduction to circuits and devices. Component models, transient analysis, steady state analysis, Laplace transform, and active and passive filter networks. Prerequisites: A grade of C or better in PHY116 or PHY131 or permission of Instructor or Division or Department Chair. Corequisites: MAT276 or permission of Instructor or Division or Department Chair.
Division: Physical Sciences and Engineering

EEE230 / Computer Organization and Assembly Language
4 Credits / 5.0 Periods for Lecture & Lab
Assembly language programming including input/output (I/O) programming and exception/interrupt handling. Register-level computer organization, I/O interfaces, assemblers, and linkers. Processor organization and design, data path, control, pipelining, and input/output. Memory organization with cache and virtual memory. Prerequisites: A grade of C or better in [(CSC100 or CSC110) and CSC/EEE120], or permission of Instructor or Division or Department Chair.
Crosslisted: CSC230
Division: Physical Sciences and Engineering