

EL 205 - Digital System Design w/Lab

4 Credit Hours

This course provides an introduction to digital logic design, number theory, boolean algebra, switching functions, and Karnaugh maps. This course offers a deep dive into the fundamental logic building blocks for combinational circuit design, memory elements, finite state machines, synchronous sequential circuit design, datapaths, counters, shifters, and number representation in digital systems. Additionally, a brief introduction to advanced digital design hardware, including field programmable gate arrays (FPGA), is covered.