ELET221N : Advanced Digital Circuits

Advanced topics in digital electronics are covered in the course. These topics include the internal structure of logic families, complex digital circuits, Flip-Flop operations, applications, counter designs using state machine, state diagrams, K-Maps, shift registers and memory devices. A/D and D/A conversion, timing diagrams, computer bus systems, and complex circuit debugging are also included. The topic of digital interfacing is also covered. This includes interfacing various logic families to each other as well as interfacing logic to various I/O loads, such as inductive loads and 120V AC loads. Theory and laboratory work on advanced concepts in digital circuit design will be covered.

Class Hours 3
Lab Hours 3 **Credits** 4
Prerequisites
MATH120N, ELET121N.