

ETRO 143L : Digital Electronics Laboratory

Credits: 1

Class Hours: 3 lab

Prerequisites: Admission into the Electronics Technology program.

Corequisite Courses:

ETRO 143

Description: This course demonstrates the principles studied in ETRO 143 by means of laboratory experiments. Digital electronics concepts presented in ETRO 143 lectures are verified and reinforced by simulating, building, and testing digital electronics and computer circuits.

Semester Offered: Fall

Course Student Learning Outcomes (CSLOs):

1. Utilize binary, octal, decimal, and hexadecimal numbering systems and digital codes, convert from one number system to another, perform mathematical operations using these number systems, and then relate the results to various digital circuit constructs.
2. Build various digital integrated circuits that demonstrate and verify truth tables and timing diagrams.
3. Demonstrate interfacing to an analog world using electronics hardware.
4. Demonstrate an understanding of semi-conductor memory functions using hardware.