

Course Title	Digital Logic Design Lab
Course Code	DC-121L
Credit Hours	1
Category	Domain Core
Prerequisite	Applied Physics
Co-Requisite	None
Follow Up	None
Course Description	The course aims at providing knowledge of various logic gates and flip flops and their characteristic truth tables to enable students to design and analyze combinational and sequential circuits. The important combinational circuits e.g., encoders, decoders, multiplexer, de-multiplexer and their applications are discussed in length. Students should be able to design a simple ALU using these standard circuits. In sequential circuits, construction and design of various registers, counters, memories and their applications are discussed. Finally the course terminates at the introduction of some combinational programming devices (PROM, PLA, PAL) and sequential programming devices (SPLD, CPLD, FPGA) and their usage in the industry
Text Book(s)	Digital Design, M. Morris Mano, Pearson Education, 3rd Edition, 2004
Reference Material	Digital Fundamentals, T. L. Floyd, Prentice Hall, 8th Edition, 2002