

Course Title	DIGITAL LOGIC DESIGN
Course Code	CSC 124
Course Purpose and Objectives	The purpose of this course is to introduce students to digital logic and circuits. This course utilizes both the classical approach to digital logic design (i.e., pen and paper) in addition to the modern schematic capture and hardware description language (VHDL and/or GHDL). This will allow the students to have a hands-on experience in circuit design and get a deeper understanding of how computer systems are designed and process their data prior moving to the course of Computer Architecture which includes more abstract terms in regard to the processing of signals and data.
Learning Outcomes	<ol style="list-style-type: none"> 1. Explain how and why information is coded and manipulated in a variety of different ways. 2. Use of Hardware Description Languages such as VHDL and/or GHDL 3. Develop, build and test combinational digital circuits. 4. Develop, build and test sequential digital circuits.
Course Content	<ul style="list-style-type: none"> • Digital systems and information • Digital logic and electrical circuits <ul style="list-style-type: none"> ○ Combinational logic design ○ Sequential logic design • hardware description languages (VHDL) • Laboratory work