CSCI-C421/CSCI-B541/INFO-I400
DIGITAL DESIGN/HARDWARE SYSTEM DESIGN I

Spring 2020

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Prerequisite: CSCI-C 335 grade of C- or better

Tuesday & Thursday 1:00PM - 2:50PM
Northside Hall (NS) 205

Course Description:
This course presents a structured design philosophy, emphasizing hardware building blocks, circuit synthesis, and microprogramming. In the laboratory, students build, study, and debug a working minicomputer from elementary hardware components. This course will be a combination of lecture and laboratory.

Tentative Topics
- ✓ Introduction and Fundamentals
- ✓ Combinational Logic Design
- ✓ Sequential Logic Design
- ✓ Hardware Description Languages
- ✓ Digital Building Blocks
- ✓ ARM Architecture
- ✓ Microarchitecture
- ✓ Memory Systems
- ✓ I/O Systems

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