

## **Computer Engineering: Electronic Devices for Ubiquitous Computing (Option A)**

**September 2019** (for students who entered first year in September 2016 or September 2017)

Year 2

Term A

AM 2270A Applied Mathematics for Engineering II
CS 1037A Computer Science Fundamentals II

ECE 2205A Electric Circuits I
ECE 2240A Electrical Laboratory
ECE 2277A Digital Logic Systems

Writ 2130F Building Better (Communication) Bridges: Rhetoric &

**Professional Communication for Engineers** 

Term B

AM 2276B Applied Mathematics for Elec. & Mech. Engineering III

ECE 2231B Introduction to Electronics
ECE 2233B Circuits and Systems

ECE 2242B Principles of Design in Electrical Engineering ECE 3375B Microprocessors and Microcomputers

ECE 3380B Advanced Digital Systems

Year 3

Term A

CS 2211A Software Tools and Systems Programming

Math 2151A Discrete Structures for Engineering

ECE 3330A Control Systems
ECE 3349A Introduction of VLSI
ECE 3389A Computer System Design

One 0.5 non-technical elective

Term B

CS 2210B Data Structures and Algorithms

ECE 2236B Magnetic Circuits and Transmission Lines

ECE 3331B Introduction to Signal Processing ECE 3390B Hardware/Software Co-Design

SE 2203b Software Design

SS 2143B Applied Statistics and Data Analysis for Engineers

Year 4

Term A

ECE 4415 Computer Engineering Design Project

ECE 4436A Networking: Principles, Protocols & Architecture

ECE 4437A Communications Theory

SE 3313A Operating Systems for Software Engineering One 0.5-credit non-technical elective from approved list

One 0.5-credit technical elective

Term B

ECE 4415 Computer Engineering Design Project ECE 4460B Real-Time and Embedded Systems

ES 4498G Engineering Ethics, Sustainable Development & the

Law

SE 3314B Computer Networks Applications

One 0.5-credit technical elective

One 0.5-credit non-technical elective from approved list

**NOTES:** 

## Non-technical electives:

Please choose 1.0 credits (one 1.0-credit or two 0.5-credit courses) from the 1000 level and one 0.5-credit course from the 2000 (or higher) level.

## **Technical Electives**

Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.

ECE 3332A/B	Electric Machines
ECE 3333A/B	Electric Power Systems I
ECE 3337A/B	Electronic Circuits
ECE 3370A/B	Communication Electronics I
ECE 4429A/B	Advanced Digital Signal Processing
ECE 4438A/B	Advanced Image Processing and Analysis
ECE 4445A/B	Introduction to Digital Image Processing
ECE 4455A/B	Biomedical Systems Analysis
ECE 4469A/B	Applied Control Systems
	Maximum one of:
CS 3319A/B	Databases I
CS 3340A/B	Analysis of Algorithms I
CS 3346A/B	Artificial Intelligence I
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