

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

**September 2020** (for students who entered first year in September 2017 or 2016)

# 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
SE 4460 A/B	Machine Learning & Design
	Maximum one of:
CS 3319A/B	Databases I
CS 3340A/B	Analysis of Algorithms I
CS 3346A/B	Artificial Intelligence I