Western Engineering

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

September 2022 *(for students who entered first year in September 2019)*

Year 2

Term A

AM 2270A	Applied Mathematics for Engineering II
CS 1027A	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
SE 2205A	Algorithms & Data Structure for Object-Oriented Design

Term B

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

One 0.5 non-technical elective

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
ELI 4110G	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