Western Engineering

Computer Engineering: Software Systems for Ubiquitous Computing (Option B)

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 2277A	Digital Logic Systems
Math 2151A	Discrete Structures for Engineering
SE 2203A	Software Design

Term B

AM 2276B	Applied Mathematics for Elec. & Mech. Engineering III
ECE 3375B	Microprocessors and Microcomputers
ECE 3380B	Advanced Digital Systems
MSE 2233B	Circuits and Systems
SE 2205B	Algorithms and Data Structures for Object-Oriented Design
SS 2143B	Applied Statistics and Data Analysis for Engineers

Year 3

Term A

ECE 3330A	Control Systems
ECE 3389A	Computer System Design
ECE 4436A	Networking: Principles, Protocols & Architecture
SE 3313A	Operating Systems for Software Engineering
SE 3316A	Web Technologies
SE 3352A	Software Requirements and Analysis

Term B

ECE 3331B	Introduction to Signal Processing
ECE 3390B	Hardware/Software Co-Design
ECE 4460B	Real-Time and Embedded Systems
SE 3314B	Design and Implementation of Computer Networks
SE 3353B	Human-Computer Interface Design
Writ 2130G	Building Better (Communication) Bridges: Rhetoric & Professional Communication for Engineers

Year 4

Term A

ECE 4415	Computer Engineering Design Project
ECE 4437A	Communications Theory
SE 4452A	Software Verification and Validation

One 0.5-credit non-technical elective from approved list
Two 0.5-credit technical electives

Term B

ECE 4415	Computer Engineering Design Project
ES 4498G	Engineering Ethics, Sustainable Development & the Law
SE 4455B	Cloud Computing: Concepts, Technologies and Applications

One 0.5-credit technical elective
Two 0.5-credit non-technical electives 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 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:
SE 3309A/B	Database Management Systems
SE 3310A/B	Theoretical Foundations of Software Engineering
SE 3351A/B	Software Project and Process Management
SE 4460 A/B	Machine Learning & Design
SE 4472A/B	Information Security