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

September 2021 *(for students who entered first year in September 2020)*

Year 2
Term A

NMM 2270A	Applied Mathematics for Engineering II
SE 2202A	Scripting Programming Language Fundamentals
ECE 2205A	Electric Circuits I
ECE 2277A	Digital Logic Systems
Math 2151A	Discrete Structures for Engineering
SE 2205A	Algorithms and Data Structures for Object-Oriented Design

Term B

NMM 2276B	Applied Mathematics for Elec. & Mech. Engineering III
ECE 3375B	Microprocessors and Microcomputers
ECE 3380B	Advanced Digital Systems
MSE 2233B	Circuits and Systems
SE 2203B	Software 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
ELI 4110G	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