

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

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

Year 2

Term A

AM 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

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 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