

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

September 2018 (students who entered first year in September 2016 or September 2017)

Year 2:

Term A

AM 2270a	Applied Mathematical Methods
CS 1037a	Computer Science Fundamentals II
ECE 2205a	Electric Circuits 1
ECE 2277a	Digital Logic Systems
Math 2151a	Discrete Structures for Engineering
SE 2203a	Software Design

Term B

AM 2276b	Applied Mathematical Methods
ECE 3375b	Microprocessors and Microcomputers
ECE 3380b	Advanced Digital Systems
MSE 2233b	Circuits and Systems
SE 2205b	Algorithms and Data Structures for Object-Oriented Des.
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, and 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
Writing 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
0.5 non-technical elective taken from the approved list	
Two 0.5 technical electives	

Term B

ECE 4415	Computer Engineering Design Project
ES 4498G	Engineering Ethics, Sustainable Development and the Law
SE 4455b	Cloud Computing: Concepts, Technologies and Applications
One 0.5 technical elective	
1.0 non-technical electives taken from the 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 from the 2000+ level.

Technical Elective List:

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 4472a/b	Information Security