

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

September 2021 (for students who entered first year in September 2018)

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| <p>Year 2</p> <p>Term A</p> <p>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 2203A Software Design</p> <p>Term B</p> <p>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</p> <p>Year 3</p> <p>Term A</p> <p>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</p> <p>Term B</p> <p>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</p> <p>Year 4</p> <p>Term A</p> <p>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</p> <p>Term B</p> <p>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</p> | <p>NOTES:</p> <p>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.</p> <p>Technical Electives Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.</p> <table border="1" style="width: 100%;"> <tr><td>ECE 4429A/B</td><td>Advanced Digital Signal Processing</td></tr> <tr><td>ECE 4438A/B</td><td>Advanced Image Processing and Analysis</td></tr> <tr><td>ECE 4445A/B</td><td>Introduction to Digital Image Processing</td></tr> <tr><td>ECE 4455A/B</td><td>Biomedical Systems Analysis</td></tr> <tr><td>ECE 4469A/B</td><td>Applied Control Systems</td></tr> <tr><td colspan="2" style="text-align: center;">Maximum one of:</td></tr> <tr><td>SE 3309A/B</td><td>Database Management Systems</td></tr> <tr><td>SE 3310A/B</td><td>Theoretical Foundations of Software Engineering</td></tr> <tr><td>SE 3351A/B</td><td>Software Project and Process Management</td></tr> <tr><td>SE 4460 A/B</td><td>Machine Learning & Design</td></tr> <tr><td>SE 4472A/B</td><td>Information Security</td></tr> </table> | 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 |
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| ECE 4438A/B | Advanced Image Processing and Analysis | | | | | | | | | | | | | | | | | | | | | | |
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| SE 3309A/B | Database Management Systems | | | | | | | | | | | | | | | | | | | | | | |
| SE 3310A/B | Theoretical Foundations of Software Engineering | | | | | | | | | | | | | | | | | | | | | | |
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