## Software Engineering
### September 2017 (students who entered first year in September 2012 or 2013)

### Year 2:
#### Term A
- AM 2270a  Applied Mathematics for Engineering II
- ECE 2277a  Digital Logic Systems
- SE 2203a  Software Design
- Math 2151a  Discrete Structures for Engineering
- CS 1037a  Computer Science Fundamentals II
- SS 2141a  Applied Probability and Statistics

#### Term B
- AM 2276b  Applied Mathematics for Elect & Mech Eng III
- ECE 2238b  Introduction to Electrical Engineering
- SE 2250b  Software Construction
- SE 2205b  Algorithms and Data Structures
- ES 2211G  Engineering Communications

One 0.5 Science course from approved list

### Year 3:
#### Term A
- ECE 4436a  Networking: Principles, Protocols, and Architecture
- SE 3309a  Database Management Systems
- SE 3313a  Operating Systems for Software Engineering
- SE 3316a  Web Technologies
- SE 3352a  Software Requirements & Analysis

#### Term B
- ECE 3375b  Microprocessors and Microcomputers
- SE 3310b  Theoretical Foundations of Software Engineering
- SE 3314b  Computer Networks Applications
- SE 3351b  Software Project and Process Management
- SE 3353b  Human-Computer Interaction
- SE 3350b  Software Engineering Design I

### Year 4:
#### Term A
- Bus 2299E  Business for Engineers
- SE 4450  Software Engineering Design II
- SE 4452a  Software Testing and Maintenance
- SE 4472a  Information Security

Two 0.5 technical electives

#### Term B
- Bus 2299E  Business for Engineers
- SE 4450  Software Engineering Design II
- SE 4455b  Cloud computing: concepts, technologies and applications
- ES 4498G  Engineering Ethics, Sustainable Development and the Law

One 0.5 technical electives

0.5 non-technical elective taken from approved list

### Technical Elective List:

Some technical electives may not be offered in a given academic year. Consult the department for accurate listing.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>ECE 4460A/B</td>
<td>Real-Time and Embedded Systems</td>
</tr>
<tr>
<td>ECE 3389A/B</td>
<td>Computer System Design</td>
</tr>
<tr>
<td>ECE 3390A/B</td>
<td>Hardware/Software Co-Design</td>
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<tr>
<td>CS 2101A/B</td>
<td>Foundations of Programming for High Performance</td>
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<tr>
<td>CS 3346A/B</td>
<td>Artificial Intelligence I</td>
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<tr>
<td>CS 4442A/B</td>
<td>Artificial Intelligence II</td>
</tr>
<tr>
<td>CS 3388A/B</td>
<td>Computer Graphics I</td>
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<tr>
<td>CS 4482A/B</td>
<td>Game Engine Development</td>
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<tr>
<td>CS 3101A/B</td>
<td>Theory and Practice of High Performance Computing</td>
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<tr>
<td>CS 4483A/B</td>
<td>Game Design</td>
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<tr>
<td>CS 3342A/B</td>
<td>Organization of programming languages</td>
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<tr>
<td>CS 2034A/B</td>
<td>Data Analytics: Principles and Tools</td>
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<tr>
<td>SE 4470a/b</td>
<td>Selected Topics in Software Eng. I</td>
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<tr>
<td>SE 4471a/b</td>
<td>Selected Topics in Software Eng. II</td>
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