

## Bachelor of Science in Software Engineering Model Full-Time Track - V3.3

| Freshman Year                        |  | Q1          | Q2 | Q3 |
|--------------------------------------|--|-------------|----|----|
| SE1011                               | Software Development I <sup>3</sup>        | 4           |    |    |
| CH200 <sup>1</sup>                   | Chemistry I <sup>1,3</sup>                 | 4           |    |    |
| MA136                                | Calculus for Engineers I                   | 4           |    |    |
| GS1001                               | Freshman Studies I                         | 4           |    |    |
| Total: 14 hours lecture, 4 hours lab |  | Credits: 16 |    |    |
| SE1021                               | Software Development II <sup>3</sup>       |             | 4  |    |
| PH2011                               | Physics I - Mechanics <sup>3</sup>         |             | 4  |    |
| MA137                                | Calculus for Engineers II                  |             | 4  |    |
| GS1002                               | Freshman Studies II                        |             | 4  |    |
| Total: 14 hours lecture, 4 hours lab |  | Credits: 16 |    |    |
| CS2852                               | Data Structures <sup>3</sup>               |             |    | 4  |
| PH2021                               | Physics II - Electromagnetics <sup>3</sup> |             |    | 4  |
| MA231                                | Calculus for Engineers III                 |             |    | 4  |
| GS1003                               | Freshman Studies III                       |             |    | 4  |
| Total: 14 hours lecture, 4 hours lab |  | Credits: 16 |    |    |

| Sophomore Year                       |   | Q1          | Q2 | Q3 |
|--------------------------------------|---|-------------|----|----|
| SE2030                               | Software Engineering Tools and Practices <sup>3</sup> | 3           |    |    |
| CS2911                               | Network Protocols <sup>3</sup>                        | 4           |    |    |
| MA2310                               | Discrete Mathematics I                                | 3           |    |    |
|                                      | Math/Science Elective <sup>2</sup>                    | 3           |    |    |
|                                      | Business Elective <sup>2</sup>                        | 3           |    |    |
| Total: 14 hours lecture, 4 hours lab |   | Credits: 16 |    |    |
| SE2811                               | Software Component Design <sup>3</sup>                |             | 4  |    |
| SE2840                               | Web Application Development <sup>3</sup>              |             | 4  |    |
| CS2711                               | Computer Organization                                 |             | 4  |    |
|                                      | Science Elective <sup>2,3</sup>                       |             | 4  |    |
| Total: 13 hours lecture, 6 hours lab |   | Credits: 16 |    |    |
| SE2040                               | Software Development III <sup>3</sup>                 |             |    | 4  |
| SE2800                               | Software Engineering Process I <sup>3</sup>           |             |    | 3  |
| SE2832                               | Introduction to Software Verification <sup>3</sup>    |             |    | 4  |
| MA262                                | Probability and Statistics                            |             |    | 3  |
| BA3444                               | Org. Behavior & Leadership Development                |             |    | 3  |
| Total: 14 hours lecture, 6 hours lab |   | Credits: 17 |    |    |

<sup>1</sup>CH-200 may be replaced with BI-102 – Cell Biology and Genetics

| Junior Year                          |  | Q1          | Q2 | Q3 |
|--------------------------------------|--|-------------|----|----|
| SE3010                               | Software Development Laboratory I                    | 4           |    |    |
| SE3800                               | Software Engineering Process II                      | 3           |    |    |
| SE3821                               | Software Requirements and Specification <sup>3</sup> | 4           |    |    |
| CS3860                               | Introduction to Database Systems <sup>3</sup>        | 4           |    |    |
| OR402                                | Professional Guidance                                | 1           |    |    |
| Total: 14 hours lecture, 4 hours lab |  | Credits: 16 |    |    |
| SE3020                               | Software Development Laboratory II <sup>3</sup>      |             | 3  |    |
| SE3810                               | Principles of Software Architecture <sup>3</sup>     |             | 4  |    |
| CS3840                               | Operating Systems                                    |             | 4  |    |
| MA3320                               | Discrete Mathematics II                              |             | 3  |    |
|                                      | Humanities/Social Science Elective <sup>2</sup>      |             | 3  |    |
| Total: 15 hours lecture, 4 hours lab |  | Credits: 17 |    |    |
| SE3030                               | Software Development Laboratory III <sup>3</sup>     |             |    | 3  |
| CS3851                               | Algorithms <sup>3</sup>                              |             |    | 4  |
| MA383                                | Linear Algebra                                       |             |    | 3  |
| HU432                                | Ethics for Prof. Managers and Engineers              |             |    | 3  |
|                                      | Free Elective <sup>2</sup>                           |             |    | 3  |
| Total: 14 hours lecture, 4 hours lab |  | Credits: 16 |    |    |

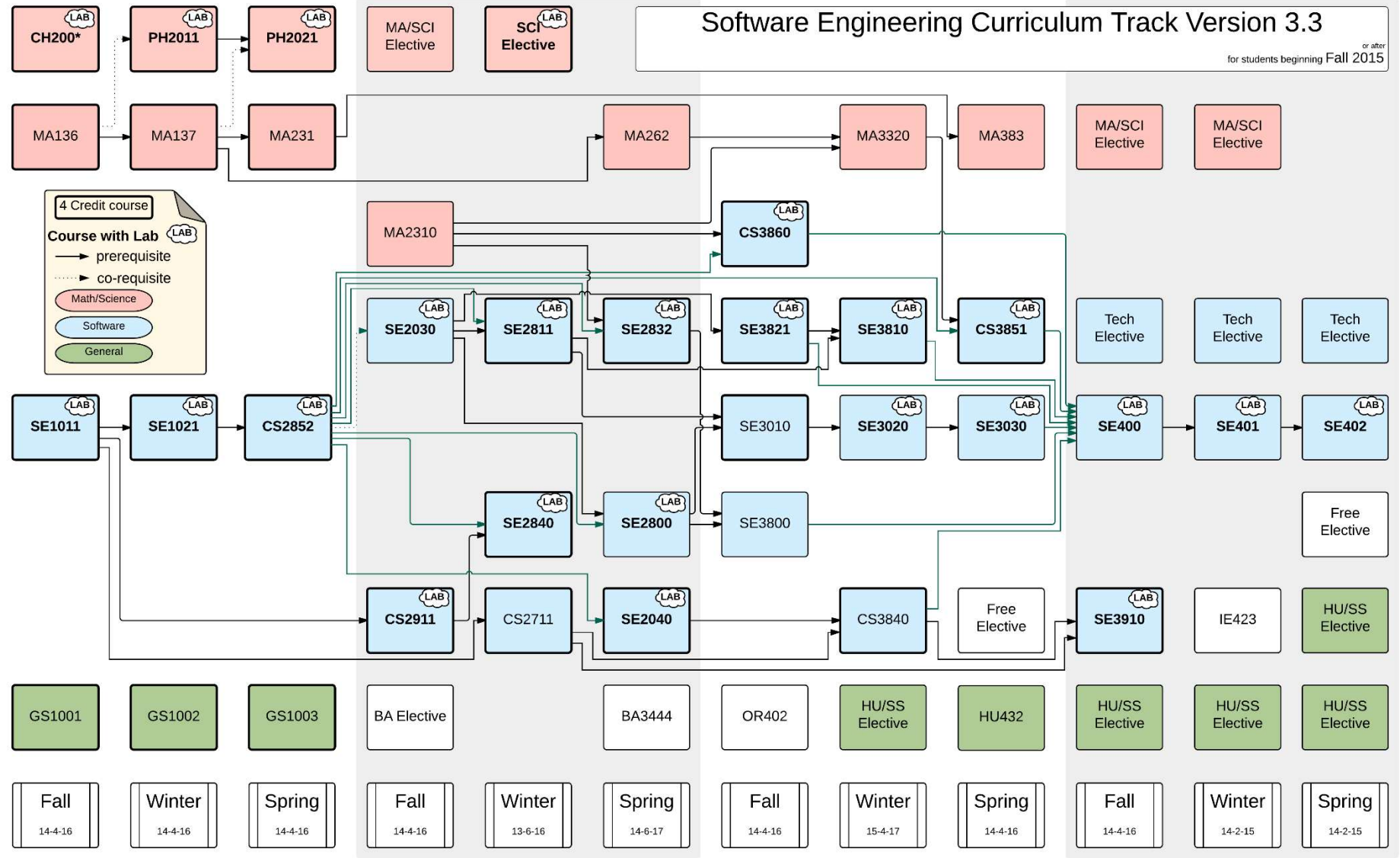
| Senior Year                          |   | Q1          | Q2 | Q3 |
|--------------------------------------|---|-------------|----|----|
| SE400                                | Senior Design Project I <sup>3</sup>            | 3           |    |    |
|                                      | Technical Elective <sup>2</sup>                 | 3           |    |    |
| SE3910                               | Real-Time Systems <sup>3</sup>                  | 4           |    |    |
|                                      | Math/Science Elective <sup>2</sup>              | 3           |    |    |
|                                      | Humanities/Social Science Elective <sup>2</sup> | 3           |    |    |
| Total: 14 hours lecture, 4 hours lab |   | Credits: 16 |    |    |
| SE401                                | Senior Design Project II <sup>3</sup>           |             | 3  |    |
|                                      | Technical Elective <sup>2</sup>                 |             | 3  |    |
|                                      | Math/Science Elective <sup>2</sup>              |             | 3  |    |
| IE423                                | Engineering Economy                             |             | 3  |    |
|                                      | Humanities/Social Science Elective <sup>2</sup> |             | 3  |    |
| Total: 13 hours lecture, 2 hours lab |   | Credits: 15 |    |    |
| SE402                                | Senior Design Project III <sup>3</sup>          |             |    | 3  |
|                                      | Technical Elective <sup>2</sup>                 |             |    | 3  |
|                                      | Humanities/Social Science Elective <sup>2</sup> |             |    | 3  |
|                                      | Humanities/Social Science Elective <sup>2</sup> |             |    | 3  |
|                                      | Free Elective <sup>2</sup>                      |             |    | 3  |
| Total: 13 hours lecture, 2 hours lab |   | Credits: 15 |    |    |

<sup>2</sup>46 credits of specific electives

<sup>3</sup>Includes a laboratory

# Software Engineering Curriculum Track Version 3.3

or after  
for students beginning Fall 2015



Change from version 3.2: MS340 ← BA3444