Software Engineering, B.S. Suggested 4-Year Plan

How to Use your 4-year Plan

- This is a suggested 4-year plan for your major and not meant to replace regular academic advising.
- The plan is **flexible** and can be changed to accommodate studying abroad, a second major/minor(s) or AP/IB credits.
- You should work with an academic advisor to develop a plan that meets your interests and goals.
- You must earn a minimum of 120 credits to graduate and 77-78 major-specific credits to earn a B.S. in Software Engineering.
- Transfer students and those seeking second majors should contact the program advisor for degree planning.
- If you have any questions, contact <u>fseadvising@chapman.edu</u>.

Suggested 4-year Plan

- We encourage you to select your General Education (GE) and minor/second major/Themed Inquiry/Honors program around the plan below. Once you fill your GE classes around your major classes, you will have a better idea of space remaining each semester when choosing your Exploration Focus.
- To be enrolled full time, you must take at least 12 credits a semester.
- In order to graduate within 4 years, we recommend you take 30 credits a year.

Year 1

Fall Semester (13-14 credits for major)

- FFC 100B First Year Foundations: Grand Challenges in Science and Engineering 3 credits
- ENGR 101 Foundations of Design and Fabrication 3 credits
- CPSC 230 Computer Science I 3 credits
- CPSC 298 Computer Science Colloquium 1 credit (Topic: Intro to *Nix)
- MATH 110 Single Variable Calculus I 3 credits

OR

• MATH 115 - Accelerated Calculus Part I: Differentiation and Integration 4 credits

Spring Semester (8-9 credits for major)

- CPSC 231 Computer Science II 3 credits
- CPSC298 Computer Science Colloquium, any topic (1 credit)
- GCI 150 Grand Challenges in Science and Engineering I 1 credit
- MATH 111 Single Variable Calculus II 3 credits

OR

• MATH 116 - Accelerated Calculus Part II: Series, Differential Equations and Multivariable Calculus 4 credits

Year 2

Fall Semester (8-11 credits for major)

- Software Engineering Upper Division Requirement (3 credits)
- CPSC 298 Computer Science Colloquium 1 credit (Topic: C++ Programming)
- MATH 210 Multivariable Calculus 3 credits *
- MATH 203 Introduction to Statistics 3 credits
- GCI 200 Grand Challenges in Science and Engineering II 1 credit

Spring Semester (10 credits for major)

- Software Engineering Upper Division Requirement (3 credits)
- Software Engineering Upper Division Requirement (3 credits)
- \bullet MATH 250 Discrete Mathematics I 3 credits
- GCI 250 Grand Challenges in Science and Engineering III 1 credit

Year 3

Fall Semester (9 credits for major)

- SE 300 Software Requirements and Testing 3 credits
- <u>SE 310 Software Design</u> **3 credits**
- MATH 215 Introduction to Linear Algebra and Differential Equations 3 credits

Spring Semester (9 credits for major)

- SE 320 The Software Development Lifecycle **3 credits**
- Software Engineering Upper Division Requirement (3 credits)
- Software Engineering Elective (3 credits)

 $^{^{\}ast}$ Not required for those who took MATH 116

Year 4

Fall Semester (9 credits for major)

- <u>CPSC 354 Programming Languages</u> **3 credits**
- Software Engineering Upper Division Requirement (3 credits)
- Software Engineering Elective (3 credits)

Spring Semester (9 credits for major)

- CPSC 285 Social and Ethical Issues in Computing 3 credits
- <u>SE 498 Software Engineering Capstone Project</u> **3 credits**
- Software Engineering Elective (3 credits)