

Suggested four-year plan for the B.S. in Computer Science (Model A, for students taking Calculus I or higher in their first semester)

First Year - First Semester (15 Credits)

- [COS 125 - Introduction to Problem Solving Using Computer Programming](#) Credits: 4
- [COS 140 - Foundations of Computer Science](#) Credits: 3
- [ENG 101 - College Composition](#) Credits: 3
- or
- Elective Credits: 3
- [MAT 126 - Calculus I](#) Credits: 4
- **NOTE:** A grade of C or better in MAT 122 Pre-Calculus, or no grade record in MAT 122 and a passing score on Part 3 of the Math Placement Exam to allow you to enter MAT 126 or higher. If **NOT** at this level, see Model B Courses in Suggested Sequence.

First Year - Second Semester (16 Credits)

- [COS 135 - Applied C Programming](#) Credits: 3
- [COS 225 - Object-Oriented Design, Programming and Data Structures](#) Credits: 3
- [ENG 101 - College Composition](#) Credits: 3
- or
- Elective Credits: 3
- [MAT 127 - Calculus II](#) Credits: 4
- General Education Requirement Credits: 3

Second Year - First Semester (16 Credits)

- [COS 226 - Introduction to Data Structures and Algorithms](#) Credits: 3
- [COS 250 - Discrete Structures](#) Credits: 4
- Science Credits: 3
- General Education Credits: 3
- Elective Credits: 3

Second Year - Second Semester (15 Credits)

- [COS 235 - Computer Architecture](#) Credits: 3
- [COS 420 - Introduction to Software Engineering](#) Credits: 3
- Science Credits: 3
- Statistics Credits: 3
- General Education Requirement Credits: 3

Three Year - First Semester (16 Credits)

- [COS 301 - Programming Languages](#) Credits: 3
- [COS 331 - Operating Systems](#) Credits: 3
- [ENG 317 - Business and Technical Writing](#) Credits: 3
- Lab Science Credits: 4
- COS Elective Credits: 3

Third Year - Second Semester (16 Credits)

- [COS 430 - Introduction to Cybersecurity](#) Credits: 3

- COS Elective Credits: 3
- Lab Science Credits: 4
- General Education Credits: 3
- Elective Credits: 3

Fourth Year - First Semester (15 Credits)

- [COS 397 - Computer Science Capstone 1](#) Credits: 3
- [COS 490 - Computers, Ethics and Society](#) Credits: 3
- COS Elective Credits: 3
- Elective Credits: 3
- Elective Credits: 3

Fourth Year - Second Semester (12 Credits)

- [COS 497 - Computer Science Capstone 2](#) Credits: 3
- COS Elective Credits: 3
- Elective Credits: 3
- Elective Credits: 3

Suggested four-year plan for the B.S. in Computer Science (Model B, for students taking Pre-Calculus in their first semester)

First Year - First Semester (14 Credits)

- [COS 120 - Introduction to Programming I](#) Credits: 3
- [COS 140 - Foundations of Computer Science](#) Credits: 3
- [ENG 101 - College Composition](#) Credits: 3
- or
- Elective Credits: 3
- [MAT 122 - Pre-Calculus](#) Credits: 4

First Year - Second Semester (14 Credits)

- [COS 125 - Introduction to Problem Solving Using Computer Programming](#) Credits: 4
- [COS 135 - Applied C Programming](#) Credits: 3
- [ENG 101 - College Composition](#) Credits: 3
- or
- Elective
- [MAT 126 - Calculus I](#) Credits: 4

Second Year - First Semester (15 Credits)

- [COS 225 - Object-Oriented Design, Programming and Data Structures](#) Credits: 3
- [COS 250 - Discrete Structures](#) Credits: 4
- [MAT 127 - Calculus II](#) Credits: 4
- Lab Science Credits: 4

Second Year - Second Semester (16 Credits)

- [COS 226 - Introduction to Data Structures and Algorithms](#) Credits: 3
- [COS 235 - Computer Architecture](#) Credits: 3
- Lab Science Credits: 4

- General Education Credits: 3
- Elective Credits: 3

Third Year- First Semester (16 Credits)

- [COS 301 - Programming Languages](#) Credits: 3
- [COS 331 - Operating Systems](#) Credits: 3
- [ENG 317 - Business and Technical Writing](#) Credits: 3
- COS Elective Credits: 3
- Statistics Credits: 4

Third Year - Second Semester (16 Credits)

- [COS 420 - Introduction to Software Engineering](#) Credits: 3
- [COS 430 - Introduction to Cybersecurity](#) Credits: 3
- COS Elective Credits: 3
- Science Credits: 4
- General Education Credits: 3

Fourth Year - First Semester (15 Credits)

- [COS 397 - Computer Science Capstone 1](#) Credits: 3
- [COS 490 - Computers, Ethics and Society](#) Credits: 3
- COS Elective Credits: 3
- Science Credits: 3
- General Education Credits: 3

Fourth Year - Second Semester (15 Credits)

- [COS 497 - Computer Science Capstone 2](#) Credits: 3
- COS Elective Credits: 6
- Elective Credits: 3
- General Education Credits: 3