

4-Year Academic Plan: Computer Science

The following is a sample outline demonstrating 4-year completion of this bachelor's degree. Each student's reality will vary slightly, as this plan does not include transfer work, Advanced Placement (AP), or concurrent enrollment credits. Math and English placement will be based on the student's ACT/SAT scores. PLEASE NOTE: The following plan assumes students are prepared to take the Math course listed. If prerequisites are required, additional semesters may be required to complete degree.

This is a **GUIDE ONLY**. Please meet with your academic advisor and consult DegreeWorks for specifics.

| 1st Year Fall (15 credits) | | | | | 1st Year Spring (17 credits) | | | | |
|-------------------------------|---------|----------------------------------|---|--------|------------------------------|------|-----------------------------------|---|--------|
| MATH | 1210 | Calculus I | 4 | F/S/Su | CSIS | 1410 | Object Oriented Programming | 3 | F/S |
| CS | 1400 | Fundamentals of Programming | 3 | F/S | MATH | 1220 | Calculus II | 4 | F/S |
| CSIS | 1000 | Intro to Comp. Apps. & Internet | 3 | F/S/Su | CSIS | 1010 | E-Commerce & Global Society | 3 | F/S/Su |
| ENGL | 1010 | Intro to Academic Writing | 3 | F/S/Su | EET | 2750 | PC Hardware | 3 | F/S/Su |
| EDGE | 1010 | Becoming an Engaged Learner | 1 | F/S/Su | ENGL | 2010 | Intermediate Writing | 3 | F/S/Su |
| | | | | | LM | 1010 | Information Literacy | 1 | F/S/Su |
| 2nd Year Fall (16 credits) | | | | | 2nd Year Spring (17 credits) | | | | |
| IS | 2600 | Data Comm. & Networking | 3 | F/S | CS | 2300 | Discrete Structures | 3 | S |
| CS | 2420 | Intro to Alg's & Data Structures | 3 | F | CS | 2810 | Computer Org. & Architecture | 3 | S |
| CS | 3200 | Database Design & Mgmt. | 3 | F | CS | 3600 | Operating Systems | 3 | S |
| EET | 2780 | Digital Electronics I | 3 | F | CS | XXXX | *Upper-Division CS Elective | 3 | S-Even |
| BIOL | 1610/15 | General Biology I/Lab | 4 | F/S/Su | XXXX | XXXX | CHEM 1210/15 or PHYS 2210/15 | 5 | F/S |
| 3rd Year Fall (16-17 credits) | | | | | 3rd Year Spring (16 credits) | | | | |
| CS | 2450 | Software Engineering | 3 | F | CS | 3000 | Adv. Algorithms & Data Structures | 3 | S |
| IS | 3650 | Network Security | 3 | F | CS | 3550 | Foundations of Computation Thry | 3 | S |
| MATH | 2270 | Linear Algebra | 3 | F/S | CS | XXXX | *Upper-Division CS Elective | 3 | S-Odd |
| CS | XXXX | *Upper-Division CS Elective | 3 | F-Even | CS | XXXX | *Upper-Division CS Elective | 3 | S-Odd |
| XXXX | XXXX | 2nd Sem. of BIOL/CHEM/PHYS | 5 | F/S/Su | XXXX | XXXX | American Institutions GE | 3 | F/S/Su |
| | | | | | EDGE | 30xx | *Project Proposal & Planning | 1 | F/S/Su |
| 4th Year Fall (15 credits) | | | | | 4th Year Spring (16 credits) | | | | |
| CS | 3150 | C & C++ Programming | 3 | F | CS | 4800 | CS Capstone Project | 3 | S |
| CS | 4550 | Programming Languages | 3 | F | MATH | 3700 | Probability & Statistics | 4 | F/S |
| CS | XXXX | *Upper-Division CS Elective | 3 | F-Odd | CS | XXXX | *Upper-Division CS Elective | 3 | S-Even |
| CS | XXXX | *Upper-Division CS Elective | 3 | F-Odd | CS | XXXX | *Additional CS Elective | 3 | S-Even |
| XXXX | XXXX | Fine Arts GE | 3 | F/S/Su | XXXX | XXXX | Humanities GE | 3 | F/S/Su |
| | | | | | EDGE | 40xx | *Project Reporting & Reflection | 1 | F/S/Su |

Color Key:

General Education Courses (green)

EDGE Program Courses (orange)

Major-required courses that also fulfill GE requirement (purple)

Major Courses (black)

Electives/minor/etc. (red)

Other Notes:

▶ (*) indicates available options. See course catalog for details.