# Computer Science B.S. Degree — Suggested 5-year Plans

Track A: Students who start with CS 1420 and Calculus I.

| | FALL semester | | SPRING semester | |
|---|---|---|---|---|
| **Freshman year (28 credits)** | CS 1420: Accelerated Object-Oriented Prog | 4 | CS 2420: Intro to Algs & Data Structures | 4 |
| | MATH 1210: Calculus I† | 4 | MATH 1220: Calculus II† | 4 |
| | Gen Ed† | 3 | WRTG 2010: Intermediate Writing† | 3 |
| | Free Elective, if needed | 3 | Free Elective, if needed | 3 |
| **Sophomore year (26 credits)** | CS 3500: Software Practice I | 4 | CS 2100: Discrete Mathematics | 3 |
| | CS 3810: Computer Organization | 3 | CS 3505: Software Practice II | 3 |
| | MATH 2270: Linear Algebra | 4 | CS 3130: Engineering Prob & Stats | 3 |
| | Gen Ed (DV)† | 3 | Free Elective, if needed | 3 |
| **Junior year (24 credits)** | CS Elective | 3 | CS Elective | 3 |
| | CS 4400: Computer Systems | 3 | CS 4150: Algorithms | 3 |
| | Gen Ed (IR)† | 3 | American Institutions (AI)† | 3 |
| | Free Elective, if needed | 3 | Free Elective, if needed | 3 |
| **Senior year (25 credits)** | CS Elective | 3 | CS Elective | 3 |
| | CS Elective | 3 | CS Theory: CS 3100 or CS 3200 | 3 |
| | Math/Science Elective† | 3 | WRTG 3014 or 3015† | 3 |
| | Free Elective, if needed | 3 | Free Elective, if needed | 4 |
| **Fifth year (18 credits)** | CS 4000 (Project)‡ or CS 4940 (Thesis) | 3 | CS 4500 (Project)‡ or CS 4970 (Thesis)◁ | 3 |
| | CS Elective | 3 | CS Elective | 3 |
| | Gen Ed† | 3 | Gen Ed† | 3 |
| ***121 credits total*** | | | | |

Track B: Students who start with CS 1400 and Precalculus.

| | FALL semester | | SPRING semester | |
|---|---|---|---|---|
| **Freshman year (29 credits)** | CS 1400: Intro to Computer Programming | 4 | CS 1410: Intro to Object-Oriented Prog | 4 |
| | MATH 1080: Precalculus | 5 | MATH 1210: Calculus I† | 4 |
| | Gen Ed† | 3 | Gen Ed† | 3 |
| | Gen Ed† | 3 | WRTG 2010: Intermediate Writing† | 3 |
| **Sophomore year (28 credits)** | CS 2420: Intro to Algs & Data Structures | 4 | CS 2100: Discrete Mathematics | 3 |
| | MATH 1220: Calculus II† | 4 | CS 3500: Software Practice I | 4 |
| | American Institutions (AI)† | 3 | MATH 2270: Linear Algebra | 4 |
| | Gen Ed (IR)† | 3 | Free Elective, if needed | 3 |
| **Junior year (24 credits)** | CS 3130: Engineering Prob & Stats | 3 | CS 4150: Algorithms | 3 |
| | CS 3505: Software Practice II | 3 | CS Elective | 3 |
| | CS 3810: Computer Organization | 3 | Gen Ed (DV)† | 3 |
| | Free Elective, if needed | 3 | Free Elective, if needed | 3 |
| **Senior year (24 credits)** | CS 4400: Computer Systems | 3 | CS Theory: CS 3100 or CS 3200 | 3 |
| | CS Elective | 3 | CS Elective | 3 |
| | WRTG 3014 or 3015† | 3 | CS Elective | 3 |
| | Free Elective, if needed | 3 | Free Elective, if needed | 3 |
| **Fifth year (18 credits)** | CS 4000 (Project)‡ or CS 4940 (Thesis) | 3 | CS 4500 (Project)‡ or CS 4970 (Thesis)◁ | 3 |
| | CS Elective | 3 | CS Elective | 3 |
| | CS Elective | 3 | Math/Science Elective† | 3 |
| ***123 credits total*** | | | | |

† Honors options available, see https://honors.utah.edu/ for details.

‡ Project Students pursuing the Honors degree must take CS 4998 concurrently with CS 4500 to satisfy the Honors Thesis Work.

◁ Thesis Students pursuing the Honors degree must take CS 4999 (instead of CS 4970) to satisfy the Honors Thesis Work.

* Students may choose between CS 3100 (Fall/Spring semesters) or CS 3200 (SPRING semesters) to satisfy the Theory Restricted Elective.