Bachelor of Science

Major: Computer Science 2023-2024 Sample 4-Year Plan

Total Degree Requirements: 120 credits

| Student | Student ID# | | Student Phone # | |
|---------|-------------|-----|--------------------------|--|
| Advisor | Minimum GPA | 2.0 | Minor/Career Interest(s) | |

Students are not limited to this plan; it is meant to be used as a guide for planning purposes in consultation with your advisor. The sample schedule is one possible path to completing your degree within four years. For official program requirements, please refer to the Undergraduate Catalog.

First Year

Fall

| Prefix + Number | Course Title | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|---|------------------------|---------|----------|-------|
| CSC 100L | Introduction to Computer Science Lab | | 1 | F | |
| CSC 150 | Computer Science I | | 3 | | |
| ENGL 101 | Composition I (SGR #1) | p. Placement | 3 | | |
| GE 101 | Introduction to Engineering and Technical Professions | | 1 | | |
| MATH 123 | Calculus I (SGR #5) | p. Placement | 4 | | |
| SGR #4 | Arts & Humanities (SGR #4) | | 3 | | |
| | | Total Credit Hours | 15 | | |

Spring

| Prefix + Number | Course Title | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|--|------------------------|---------|----------|-------|
| CMST 101 | Foundations of Communications (SGR #2) | | 3 | | |
| CSC 250 | Computer Science II | | 3 | | |
| ENGL 277 | Technical Writing in Engineering | p. ENGL 101, GE 101 | 3 | | |
| INFO 102 | Data Ethics (SGR #3) | | 3 | | |
| MATH 125 | Calculus II | p. MATH 123 | 4 | | |
| | | Total Credit Hours | 16 | | |

Second Year

Fall

| Prefix + Number | Course Title | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|--|---|---------|----------|-------|
| CSC 244 | Digital Logic | Co-req. CSC 314 | 3 | F | |
| CSC 244L | Digital Logic Lab | | 1 | F | |
| CSC 300 | Data Structures | p. CSC 250 (>= C) | 3 | | |
| CSC 314 | Assembly Language | p. CSC 250 (>= C) | 3 | F | |
| MATH 250 | Introduction to Linear Algebra and Proof | p. MATH 123 | 3 | | |
| SGR #6 | Natural Science Sequence (SGR #6) | BIOL 151, CHEM 112, PHYS 111 OR PHYS 207 | 4 | | |
| | | Total Credit Hours | 17 | | |

Spring

| Prefix + Number | Course Title | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|---|---|---------|----------|-------|
| CSC 303 | Ethical and Security Issues in Computer Science | | 3 | S | |
| CSC 317 | Computer Org and Arch | p. CSC 314 (requires grade >= C) | 3 | S | |
| CSC 346 | Object Oriented Programming | p. CSC 300 (requires grade >= C) | 3 | S | |
| MATH 316 | Discrete Mathematics | p. MATH 250 | 3 | | |
| SGR #6 | Natural Science Sequence (SGR #6) | BIOL 153, CHEM 114, PHYS 113 OR PHYS 209 | 4 | | |
| | | Total Credit Hours | 16 | | |



Third Year

| Prefix + Number | Course Title | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|-------------------------------------|---|---------|----------|-------|
| CSC 354 | Systems Programming | p. CSC 346 (>= C) | 3 | F | |
| Natural Science | Choose one of the following: | BIOL 151/ CHEM 112/PHYS 111/PHYS 207 | 4 | | |
| SE 305 | Foundations Of Software Engineering | p. CSC 300, (>= C) | 3 | F | |
| SGR #3 | Social Sciences (SGR #3) | | 3 | | |
| STAT 281 | Statistical Methods I | p. MATH 103 or higher | 3 | | |
| | | Total Credit Hours | 16 | | |

Spring

| Prefix + Number | Course Title | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|---|------------------------|---------|----------|-------|
| CSC 461 | Programming Language | p. CSC 300, (>= C) | 3 | S | |
| CSC 484 | Database Management | p. CSC 300, (>= C) | 3 | S | |
| MATH 374 | Scientific Computation I | p. CSC 150, MATH 125 | 3 | | |
| SE 306 | Software Project Management and Testing | p. SE 305, (>= C) | 3 | S | |
| | | Total Credit Hours | 12 | | |

Fourth Year

Fall

| Prefix + Number | Course Title | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|---------------------------------------|---|---------|----------|-------|
| CSC 445 | Introduction to Theory of Computation | p. CSC 250 (>= C), MATH 253, and MATH 316 | 3 | F | |
| CSC 456 | Operating Systems | p. CSC 300, CSC 314, (>= C) | 3 | F | |
| CSC 464 | Senior Design I | p. CSC 484 or SE 306, (>= C) | 2 | F | |
| CSC ELEC | CSC ELECTIVE OPTION | FROM CSC ELECTIVES, (requires grade >= C) | 3 | | |
| CSC ELEC | CSC ELECTIVE OPTION | FROM CSC ELECTIVES, (requires grade >= C) | 3 | | |
| | | Total Credit Hours | 14 | | |

Spring

| Prefix + Number | Course Title | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|----------------------------|---|---------|----------|-------|
| CSC 446 | Compiler Construction | p. CSC 300, CSC 445, (>= C) | 3 | S | |
| CSC 465 | Senior Design II | p. CSC 464 (>= C) | 2 | S | |
| CSC ELEC | CSC ELECTIVE OPTION | FROM CSC ELECTIVES, (requires grade >= C) | 3 | | |
| CSC ELEC | CSC ELECTIVE OPTION | FROM CSC ELECTIVES, (requires grade >= C) | 3 | | |
| SGR #4 | Arts & Humanities (SGR #4) | | 3 | | |
| | | Total Credit Hours | 14 | | |

Comments/Notes

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the Honors program requirements.

A grade of "C" or above is required in all Computer Science and Software Engineering courses.