COMPUTER SCIENCE, MINOR TO SOFTWARE ENGINEERING, M.S. ACCELERATED PROGRAM

Saint Louis University's computer science minor to software engineering M.S. accelerated program allows a student to complete, in an accelerated fashion, both a minor in computer science and a Master of Science (M.S.) in Software Engineering.

SLU students may choose to pursue a minor in computer science in addition to their chosen bachelor's degree major.

For additional information, see the catalog entries for the following SLU programs:

Computer Science, Minor (https://catalog.slu.edu/colleges-schools/ science-engineering/computer-science/computer-science-minor/)

Software Engineering, M.S. (https://catalog.slu.edu/colleges-schools/ science-engineering/computer-science/software-engineering-ms/)

Requirements

Students who want to apply to this accelerated minor to master's program should have completed at least 75 credits at the time of application and must have already completed or be enrolled in CSCI 2100 Data Structures.

Students must have a cumulative grade point average (GPA) of 3.00 at SLU and must have received grades of "B" or better in all CSCI courses thus far. To apply, students must submit a personal statement and arrange for two letters of recommendation.

Non-Course Requirements

All Science and Engineering B.A. and B.S. students must complete an exit interview/survey near the end of their bachelor's program.

Continuation Standards

Students must maintain a cumulative GPA of at least 3.00 and a GPA of at least 3.00 in their computer science coursework.

Students who drop below that GPA while in the accelerated program will be placed on a one-semester probationary period before being dismissed from the accelerated program.

Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with !) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

| Course | Title | Credits |
|-------------------------|---|---------|
| Year One | | |
| Fall | | |
| Courses for major | and core | 15 |
| | Credits | 15 |
| Spring | | |
| Courses for major | and core | 15 |
| | Credits | 15 |
| Year Two Fall | | |
| Courses for major | and core | 12 |
| MATH 1510 | Calculus I | 4 |
| | Credits | 16 |
| Spring | | |
| CSCI 10xx (p. 2) | Introduction to Computer Science | 3 |
| MATH 1520 | Calculus II | 4 |
| Courses for major | and core | 9 |
| | Credits | 16 |
| Year Three | | |
| Fall | | |
| CSCI 1300 | Introduction to Object-Oriented Programming | 4 |
| MATH 1660 | Discrete Mathematics | 3 |
| Courses for major | and core | 9 |
| | Credits | 16 |
| Spring | | |
| CSCI 2100 | Data Structures | 4 |
| Courses for major | and core | 12 |
| | Credits | 16 |
| Year Four Fall | | |
| CSCI 5030 | Principles of Software Development | 3 |
| Courses for major | and core | 12 |
| | Credits | 15 |
| Spring | | |
| CSCI 5300 | Software Engineering | 3 |
| Courses for major | and core | 12 |
| | Credits | 15 |
| Year Five | | |
| Fall | | |
| CSCI 5050 | Computing and Society | 3 |
| Software | Software Engineering courses numbered | 3 |
| Engineering Elective | CSCI5300-5399 | |
| Software Engineering | Software Engineering courses numbered CSCI5300-5399 | 3 |
| Elective | | |
| CSCI Graduate | The general electives may include | 3 |
| Elective | additional selections from the Software | |
| | Engineering category | |
| | Credits | 12 |

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Spring

Introduction to Computer Science

| | Code | Title Credits |
|--|------------------------------------|---|
| | CSCI 1010 | Introduction to Computer Science: Principles |
| | CSCI 1020 | Introduction to Computer Science: Bioinformatics |
| | CSCI 1025 | Introduction to Computer Science: Cybersecurity |
| | CSCI 1030 | Introduction to Computer Science: Game Design |
| | CSCI 1040 | Introduction to Computer Science: Mobile Computing |
| | CSCI 1050 | Introduction to Computer Science: Multimedia |
| | CSCI 1060 | Introduction to Computer Science: Scientific Programming |
| | CSCI 1070 | Introduction to Computer Science: Taming Big Data |
| | CSCI 1080 | Introduction to Computer Science: World Wide Web |
| | CSCI 1090 | Introduction to Computer Science: Special Topics |
| | With permission, discipline may be | a computing-intensive course from another e substituted. Examples of such courses include: |
| | BME 2000 | Biomedical Engineering Computing |
| | CVNG 1500 | Civil Engineering Computing |
| | STAT 3850 | Foundation of Statistics |

Program Notes Internship with Industry

Students may apply at most three credits of CSCI 5910 Internship with Industry (1-3 cr) toward the degree requirements.