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

This program allows a student to complete, in accelerated fashion, both the Bachelor in Science in Computer Science and the Master of Science in Software Engineering.

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

Computer Science, B.S. (http://catalog.slu.edu/colleges-schools/arts-sciences/computer-science/computer-science-bs)

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

Requirements

Students wishing to apply to this accelerated program should have completed all 2000-level coursework required of the computer science bachelor’s program and have completed at least 75 credits at the time of application. At the time of application, students must have a cumulative GPA of at least 3.00 and a GPA of at least 3.00 in their computer science coursework.

To apply, students must submit a personal statement and arrange for two letters of recommendation from computer science faculty members.

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 work with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>Year One</strong></td>
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<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>! CSCI 10xx</td>
<td>Introduction to Computer Science (p. 2)</td>
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<tr>
<td>MATH 1510</td>
<td>Calculus I</td>
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<td>Foreign Language 1010</td>
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<td><strong>Year Two</strong></td>
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<td>CSCI 1300</td>
<td>Introduction to Object-Oriented Programming</td>
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<td>MATH 1520</td>
<td>Calculus II</td>
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<td>THEO 1000</td>
<td>Theological Foundations</td>
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<td>Foreign Language 1020</td>
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<td><strong>Year Three</strong></td>
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<td>CSCI 2100</td>
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<tr>
<td>MATH 2xxx</td>
<td>Additional Mathematics (2000+)</td>
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<td>Science I with lab</td>
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<tr>
<td>PHIL 2050</td>
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<td>Core</td>
<td>Fine and Performing Arts</td>
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<table>
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<td>CSCI 4961</td>
<td>Capstone Project I</td>
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<tr>
<td>CSCI 5030</td>
<td>Principles of Software Development (! only counted toward graduate degree)</td>
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<tr>
<td>! CSCI 5xxx</td>
<td>CSCI 5000+Graduate Elective</td>
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<tr>
<td>! Core</td>
<td>Theology 2xxx</td>
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<td>! Applied Systems Course (p. 2)</td>
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<tr>
<td>Core</td>
<td>Social Science</td>
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### Spring

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<td>! CSCI 51xx</td>
<td>CSCI 500+ Elective</td>
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<td>Core</td>
<td>Literature</td>
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<td>Core</td>
<td>Global Citizenship</td>
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<td>Core</td>
<td>Cultural Diversity in the U.S.</td>
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<td>General Elective</td>
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### Credits
17

### Year Five

#### Fall

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<tr>
<td>CSCI 5030</td>
<td>Principles of Software Development</td>
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<tr>
<td>CSCI 5050</td>
<td>Computing and Society</td>
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<tr>
<td>Software Engineering</td>
<td>Software Engineering courses numbered CSCI5300-5399</td>
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<tr>
<td>CSCI Graduate Elective</td>
<td>The general electives may include additional selections from the Software Engineering category</td>
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### Credits
12

#### Spring

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<tr>
<td>! Software Engineering Elective</td>
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### Credits
9

### Total Credits
143

### Introduction to Computer Science

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<td>CSCI 1020</td>
<td>Introduction to Computer Science: Bioinformatics</td>
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<td>CSCI 1030</td>
<td>Introduction to Computer Science: Game Design</td>
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<td>CSCI 1040</td>
<td>Introduction to Computer Science: Mobile Computing</td>
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<td>CSCI 1050</td>
<td>Introduction to Computer Science: Multimedia</td>
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<tr>
<td>CSCI 1060</td>
<td>Introduction to Computer Science: Scientific Programming</td>
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<td>CSCI 1070</td>
<td>Introduction to Computer Science: Taming Big Data</td>
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<tr>
<td>CSCI 1080</td>
<td>Introduction to Computer Science: Web Development</td>
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<td>CSCI 1090</td>
<td>Introduction to Computer Science: Special Topics</td>
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</table>

With permission, a computing-intensive course from another discipline may be substituted. Examples of such courses include:

- BME 2000 BME Computing
- CVNG 1500 Civil Engineering Computing
- STAT 3850 Foundation of Statistics

### Applied Systems Courses

<table>
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<tr>
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<tbody>
<tr>
<td>CSCI 3650</td>
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<tr>
<td>CSCI 3710</td>
<td>Databases</td>
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<tr>
<td>CSCI 4650</td>
<td>Computer Security</td>
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<tr>
<td>CSCI 4850</td>
<td>High-Performance Computing</td>
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### Program Notes

**Internship with Industry**

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