Computer Science
Associate in Science Degree, Transfer program
Division of STEM
Associate Dean: Bradley Cole
Coordinator: Joe Oppenheim

Students in the Computer Science program are educated in the design and implementation of system software. The program provides the first two years of a baccalaureate computer science degree with transfer options that include scientific programming, systems programming, systems design, computer engineering, and other computer-related disciplines. Graduates of computer science programs commonly seek employment with computer manufacturers or software houses that specialize in system software.

Graduates will be able to:
- Demonstrate knowledge and understanding of essential facts, concepts, principles, and theories relating to computer science;
- Understand and demonstrate the structure of mathematics in its relation and application to computer science;
- Apply knowledge and skills to solve problems effectively and efficiently;
- Communicate effectively with a range of audiences;
- Understand the professional, ethical, security and social issues and responsibilities in computer science.

Program Requirements:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
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<tbody>
<tr>
<td>English (ENGL 1010-1020)*</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics (MATH 1413 or higher)*</td>
<td>8</td>
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<tr>
<td>Laboratory Science electives¹</td>
<td>6</td>
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<tr>
<td>Social Sciences electives¹</td>
<td>3</td>
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<tr>
<td>Liberal Arts &amp; Sciences electives</td>
<td>6</td>
</tr>
<tr>
<td>Computer Science (CSCS 1240, 1320, 1730, 2320, 2330, 2650 and CSCS 1200)</td>
<td>25</td>
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<tr>
<td>Humanities electives¹</td>
<td>3</td>
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<tr>
<td>Program electives² (see list below)</td>
<td>6</td>
</tr>
<tr>
<td>Wellness</td>
<td>1</td>
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<tr>
<td>Total hours</td>
<td>64</td>
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Sample Sequence: (intended as a guide for academic planning. It need not be followed exactly or completed in four semesters.)

First Semester
Program Elective (CSNT 1200 recommended) ¹ 3

Second Semester
C/C++ Programming (CSCS 1320) 4
UNIX/Linux Fundamentals (CSCS 1730) 4
Mathematics (MATH 1610 or higher)³ 4
English (ENGL 1020) 3

Third Semester
Humanities elective¹ 3

Fourth Semester
Computer Organization (CSCS 2650) 4
Program elective² 3
Liberal Arts & Sciences electives³ 3
Laboratory Science elective⁴ 3
Wellness 1
Social Science elective¹ 3

Footnotes:
1 Select to fulfill requirements of transfer college. If using PHYS for laboratory science elective, select PHYS 1010 or higher
2 Select from CSCS, CSIT, CSNT, CSNS, or CSWT; select to fulfill requirements of transfer college.
3 A transfer college will typically require Calculus II or higher levels of math for Computer Science. Select to fulfill requirements of transfer college.
* Based on placement, students might be required to take developmental and/or prerequisite classes before taking the required English and Math courses.
* Students in this program who plan to transfer to a SUNY college can meet 7 of the 10 SUNY Knowledge and Skills areas and 30 SUNY General Education credits. For more information on SUNY General Education requirements, refer to the catalog index or see an advisor.
* Since programs at transfer colleges vary greatly, it is essential that students meet early with their advisor in order to select appropriate electives.
* High school or equivalent preparation required: biology, chemistry or physics and four years of mathematics, including algebra, geometry or intermediate algebra, trigonometry, and pre-calculus. Students who don’t have this preparation will be able to get it here, but it may take longer to complete the program.