COMPUTER SCIENCE, B.S.

The B.S. degree in Computer Science program is accredited by the Computing Accreditation Commission of ABET (www.abet.org (http://www.abet.org)).

Students must maintain a grade point average of at least 2.0 in the core courses, required electives, and required supporting discipline courses.

Because computer science courses change rapidly, it is recommended that the sequence CSC 130 Introduction to Computer Science, CSC 230 Elementary Data Structures and Algorithms, CSC 330 Advanced Data Structures be completed within 4 consecutive semesters.

Overall Requirements
• 122 credit hours, to include at least 36 credits at or above the 300 course level

Degree Program Requirements

University Requirements (https://catalog.uncg.edu/academic-regulations-policies/undergraduate-policies)
General Education Core Requirements (GEC) (https://catalog.uncg.edu/academic-regulations-policies/general-education-program/#generaleducationcorerequirementstext)
College of Arts and Sciences Additional Requirements (LEC) (https://catalog.uncg.edu/arts-sciences/#additionalundergraduaterequirementstext)

Major Requirements

The courses in the Computer Science Department are designed to teach the foundations of computing rather than a particular technology, so that the student is prepared to adapt to changing technology. Students are exposed to various programming languages and computing systems.

The job market in computer science is strong. A student completing a bachelor’s degree with a strong academic record can expect job offers as a systems programmer or analyst, applications programmer, systems support staff member, technical staff member, or similar positions. The undergraduate curriculum has also been designed to prepare students for graduate studies (master’s and doctoral degrees) in computer science. Qualified students who have an interest in research will have opportunities to participate in projects with department faculty during undergraduate or graduate studies.

In addition to the regular B.S. program, students may pursue a concentration in Data Science and Big Data, which is designed to provide Computer Science B.S. students with key knowledge of appropriate theories, algorithms, and technologies, towards development of analytical systems/models for disparate, complex, and small/large scale datasets. Students completing this concentration will have learned skills necessary to tackle a wide variety of data-focused scientific, social, and environmental challenges.

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CSC 505  Data Science  
CSC 510  Big Data and Machine Learning  

**Electives**

Select 3 credits from the courses below

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 526</td>
<td>Bioinformatics</td>
<td></td>
</tr>
<tr>
<td>CSC 529</td>
<td>Artificial Intelligence</td>
<td></td>
</tr>
<tr>
<td>CSC 550</td>
<td>Combinatorics on Words</td>
<td></td>
</tr>
<tr>
<td>CSC 555</td>
<td>Algorithm Analysis and Design</td>
<td></td>
</tr>
<tr>
<td>STA 551</td>
<td>Introduction to Probability</td>
<td></td>
</tr>
<tr>
<td>STA 573</td>
<td>Theory of Linear Regression</td>
<td></td>
</tr>
</tbody>
</table>

* CSC 330 Advanced Data Structures and CSC 471 Principles of Database Systems are currently required in the B.S. program, and other CSC courses below may be used to satisfy B.S. elective requirements as well as concentration requirements.

**Electives**

Electives sufficient to complete the 122 credit hours required for the degree.

**Accelerated B.S. to M.S.**

**Application and Admission**

Qualified UNC Greensboro undergraduate students who are pursuing the Bachelor of Science in Computer Science may apply for admission to the Accelerated Degree Program. A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNC Greensboro is required. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year. Applicants will not be required to take the GRE. All applicants must submit the Request for Accelerated Degree Program to the Graduate School and must simultaneously apply for admission to the graduate degree program.

**ADP Courses**

Admitted students may apply the following 12 credits of graduate-level coursework toward completion of both the undergraduate and graduate degree, provided that they earn a grade of "B" (3.0) or better in the course and fulfill graduate-level requirements:

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>CSC 553</td>
<td>Theory of Computation</td>
<td>3</td>
</tr>
<tr>
<td>CSC 555</td>
<td>Algorithm Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CSC 562</td>
<td>Principles of Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSC 567</td>
<td>Principles of Computer Networks</td>
<td>3</td>
</tr>
</tbody>
</table>

**Degree Program Requirements**

Please consult with an advisor to determine how the course taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the Master of Science in Computer Science remain the same.