COMPUTER SCIENCE COMPREHENSIVE, BACHELOR OF SCIENCE

Offered by Department of Computer Science and Information Technology

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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### General Studies

#### Foundational Core (Written, Math, Oral, Democracy)

Foundational Core courses

- **Including:**
  - MATH 115 Calculus I with Analytic Geometry

#### Portal

Select one course numbered 188

#### Distribution

- Aesthetics
- Humanities
- Social Sciences
- Natural Sciences
- Analytical and Quantitative Thought

#### Including:

- CSIT 310 Introduction to Computer Science
- Wellness
- Needed to reach 27 credit hour minimum in Distribution

#### Capstone

Select one course numbered 388

### BS Science-related course requirements

Take 1 course from the following:

- STAT 241 Elementary Statistics
- STAT 345 Applied Statistics I
- STAT 441 Probability and Statistics

### Major Option

Complete all required courses

### Unrestricted electives

Needed to reach 120 credit hour minimum

A grade of "C" or above is required for all courses in this Option. In this option, prerequisites are fulfilled when the prerequisite courses have been passed with a "C" or above.

### Computer Science Comprehensive Core Requirements

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>CSIT 150</td>
<td>Object Oriented Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 180</td>
<td>Discrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 301</td>
<td>Computer Organization</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 330</td>
<td>Algorithms and Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 401</td>
<td>Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 402</td>
<td>Introduction to Automata, Formal</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Languages, and Computability</td>
<td></td>
</tr>
<tr>
<td>CSIT 404</td>
<td>Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 408</td>
<td>Principles of Programming Languages</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 425</td>
<td>Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 441</td>
<td>Artificial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>CSIT 496</td>
<td>Seminar in Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>MATH 202</td>
<td>Calculus II with Analytic Geometry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 440</td>
<td>Linear Algebra</td>
<td>3</td>
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### Computer Science Electives

Select 9 credit hours of the following:

- CSIT 300-CSIT 499 (except CSIT 388, CSIT 492 - CSIT 495)
- Select 9 credit hours of the following:
- CSIT 300-CSIT 499
- MATH 300-MATH 499
- PHYS 300-PHYS 499

**Total Credit Hours** 59

1. Students without sufficient preparation will also need to take the following courses, increasing the total credit hours needed:
   - MATH 102
   - MATH 103

2. As approved by the department.

3. Except CSIT 388. Take no more than 6 credit hours from CSIT 492, CSIT 493, CSIT 494, CSIT 495

4. Except PHYS 388