# APPLIED COMPUTER SCIENCE, BACHELOR OF SCIENCE DEGREE

Offered by Department of Computer Science and Information Technology

All courses in this major require a minimum grade of "C". In this option, prerequisites are fulfilled when the prerequisite courses have been passed with a "C" or above.

## Major Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<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 Languages, and Computability</td>
<td>3</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 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>
</tbody>
</table>

## Computer Science Electives

Select 6 credit hours of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIT 300-CSIT 499</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credit Hours 36

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

2. A minor or second major is required for a complete degree program. The number of required electives needed to reach 120 total credit hours overall will depend upon the specific program chosen.

3. Take no more than 3 credit hours from CSIT 399, CSIT 492, CSIT 493, CSIT 494, CSIT 495

## BS Science-related course requirements

Select one of the following:

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

Total Credit Hours 3

## Unrestricted electives

Needed to reach 120 credit hour minimum 10

## Code

### 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 130 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

Select one of the following:

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

Total Credit Hours 36

## Minor or 2nd Major

Complete all required courses

Total Credit Hours 24