### Major Requirements (72 Units)

Grades of "C" or better required. Courses may not need to be completed in order listed.

<table>
<thead>
<tr>
<th>Course</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPTG 121</td>
<td>MATH 121</td>
</tr>
<tr>
<td>CPTG 122</td>
<td>CPTG 121</td>
</tr>
<tr>
<td>CPTG 244</td>
<td>CPTG 122</td>
</tr>
<tr>
<td>CPTG 245</td>
<td>CPTG 122</td>
</tr>
<tr>
<td>CPTG 255</td>
<td>CPTG 122</td>
</tr>
<tr>
<td>CPTG 324</td>
<td>CPTG 244 &amp; 245</td>
</tr>
<tr>
<td>CPTG 434</td>
<td>CPTG 244 &amp; 245</td>
</tr>
<tr>
<td>CPTG 445</td>
<td>CPTG 244 &amp; 245</td>
</tr>
</tbody>
</table>

*Maximum of 4 units from the Major, and 8 units of Cognates required by the Major, may apply to University Studies General Studies requirements (2019-2020 Undergraduate Academic Bulletin p. 72).*

#### University Studies Foundational Studies (21-34 Units)

Grades of "C" or better required.

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>I FIRST-YEAR SEMINAR</td>
<td>UNST 101A (1), 101B (1) and UNST 101C (1)</td>
</tr>
<tr>
<td>II RHETORICAL SKILLS</td>
<td>A. ENGL 111 (3), 112 (3), 113 (3) College Writing or ENGL 124 Freshman Seminar (4)</td>
</tr>
<tr>
<td>B. Upper Division Rhetoric: CPTG 334 (4) or CPTG 455.</td>
<td></td>
</tr>
<tr>
<td>III MATHEMATICS</td>
<td>One college-level Mathematics course (4) Major requires MATH 131</td>
</tr>
<tr>
<td>IV WORLD LANGUAGES</td>
<td>Level 3 proficiency (e.g. 153) in one non-English language (4-12)</td>
</tr>
<tr>
<td>V HEALTH AND FITNESS</td>
<td>HSLS 120 Lifetime Fitness (2)</td>
</tr>
</tbody>
</table>

#### University Studies General Studies (52 Units, 16 Upper Division)

Grades of "D" or better required, unless courses are required by major.

<table>
<thead>
<tr>
<th>Theme I SOCIAL SCIENCES (SSCI) 8 units</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Globalization, Identity and Citizenship (4 units from SSCI 204/205/206/207/208/209)</td>
<td>Prerequisite: ENGL 113/124</td>
</tr>
<tr>
<td>Social Science Breadth Courses (4 units)</td>
<td></td>
</tr>
</tbody>
</table>

| Theme II ARTS AND HUMANITIES (HUMN) 12 units                           |                                                                                 |
| Exploring Culture (4 units from HUMN 104/105/106/107/108/109)         | Prerequisite: ENGL 111/124                                                     |
| Arts and Humanities Breadth Courses (4 units)                          |                                                                                 |

| Theme III RELIGIOUS BELIEFS AND PRACTICES (RLGN) 16 units              |                                                                                 |
| RLGN 304 Adventism in Global Perspective or RLGN 305 Religion in Three Cultures (4) | Prerequisite: ENGL 113/124, Junior Status                                   |
| A. Spiritual Experience and Expressions (0-4 units)                    |                                                                                 |
| B. Beliefs and Heritage (4 units)                                      |                                                                                 |
| C. Scripture (4 units)                                                 |                                                                                 |
| D. Religion and Society (0-4 units)                                   |                                                                                 |

| Theme IV NATURAL SCIENCES (NSCI) 12 units                              |                                                                                 |
| Scientific Foundations (4 units from NSCI 404/405/406/407/408)        |                                                                                 |
| Life Science (4 units) either life science or physical science must include a laboratory |
| Physical Science (4 units) either life science or physical science must include a laboratory |

| Theme V SENIOR SEMINAR UNST 404B Religion, Values, and Social Responsibility (4) |                                                                                 |

#### University Studies Service-Learning (3 courses)

*A maximum of 4 units from the Major, and 8 units of Cognates required by the Major, may apply to University Studies General Studies requirements (2019-2020 Undergraduate Academic Bulletin p. 72).*

**NOTE:** Should a student's general education and major degree program not meet the minimum 190 units required for graduation, the student must complete elective units to make up the deficiency.
The objectives of the Department of Computer Science are to help students build a solid computer science foundation which focuses on the technical and applied knowledge, fundamental skills sets, state-of-the-art technological advances, effective communications, and best practices necessary to compete in today’s ever-changing computer field.

CAREER PATHS: Students in the Computer Science program will begin by taking a set of fundamental core computer science courses. Students can then choose to focus in one or more career paths that they are interested in such as:

- Computer Engineering and Embedded Systems
- Software Engineering
- Information Systems
- Web and Mobile Applications
- Networks and Cyber Security
- Bioinformatics
- Preparation for Graduate Study

Computer Engineering and Embedded Systems
- CPTG 345 Digital Logic & Design
- CPTG 356 Principles of Networking
- CPTG 436 UNIX Systems Administration
- CPTG 446 Embedded Systems Design
- PHYS 117 Introduction to Physics
- PHYS 231 General Physics I
- PHYS 353 Electronics

Software Engineering
- CPTG 333 Data Science
- CPTG 334 Systems Analysis
- CPTG 364 Analysis of Algorithms
- CPTG 424 Database Design & Management
- CPTG 455 Software Engineering

Information Systems
- CPTG 334 Systems Analysis
- CPTG 356 Principles of Networking
- CPTG 436 UNIX Systems Administration
- CPTG 455 Software Engineering
- MGMT 304 The Practice of Management
- MGMT 327 Information Technology Management
- MGMT 356 Human Resource Management

Networks and Cyber Security
- CPTG 335 Cyber Security
- CPTG 356 Principles of Networking
- CPTG 374 Web Application Development
- CPTG 424 Database Design and Management
- CPTG 436 UNIX Systems Administration

Web and Mobile Applications
- CPTG 356 Principles of Networking
- CPTG 374 Web Application Development
- CPTG 384 Mobile Application Development
- CPTG 424 Database Design and Management
- ARTS 194 Photoshop & Illustrator Image Creation
- ARTS 394C Interface Design
- ARTS 394G Motion Graphics
- ARTS 395A Web Design Communication Principles

Bioinformatics
- CPTG 323 Data Science
- CPTG 364 Analysis of Algorithms
- CPTG 424 Database Design and Management
- CPTG 436 UNIX Systems Administration
- MATH 155 Introductory Statistics
- BIOL 111/111L General Biology I, Laboratory
- BIOL 302 Genetics
- BIOL 490 Bioinformatics

Graduate Study
- CPTG 345 Digital Logic & Design
- CPTG 356 Principles of Networking
- CPTG 424 Database Design and Management
- CPTG 455 Software Engineering
- MATH 132 Calculus II
- MATH 133 Calculus III
- MATH 231 Introduction to Linear Algebra & Discrete Mathematics
- MATH 361 Numerical Methods I

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Washington, D.C. 20036
http://cra.org

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Mount Laurel, NJ 08054
http://www.aitp.org

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