**COMPUTER AND INFORMATION SCIENCE**  
Associate in Science in Computer and Information Science

### Recommended Sequence  
#### Credits

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester (Fall)</strong></td>
<td>ENG 140 English Composition I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSC 102 Introduction to Technology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CSC 103 Introduction to Computing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT 141 Precalculus</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>___ GE Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>14</td>
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<tr>
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<th>Credits</th>
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<tbody>
<tr>
<td><strong>Second Semester (Spring)</strong></td>
<td>ENG 141 English Composition II or COM 105 Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSC 110 Systems Analysis</td>
<td>3</td>
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<tr>
<td></td>
<td>CSC 120 Data Communications</td>
<td>3</td>
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<tr>
<td></td>
<td>CSC 121 Programming I (Python)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT 201 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td>16</td>
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<tr>
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<tr>
<td><strong>Third Semester (Fall)</strong></td>
<td>CSC 122 Programming II (Java)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSC 230 Website Dev. &amp; Design or CSC 235 Advanced Web Applications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECO 188 Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>___ GE Lab Science Elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>___ GE Soc Sci/Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td>16</td>
</tr>
</tbody>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>Fourth Semester (Spring)</strong></td>
<td>CSC 150 Operation Systems Fundamentals: Unix/Linux</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSC 228 Advanced Programming Techniques (Data structures – Java)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT 202 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>___ GE Lab Science</td>
<td>4</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

**Total Credits Needed for Degree**  
60

### General Education Requirements for A.S.

1. **COMMUNICATION**  
   Must complete 9 credits from the following:  
   - ENG-140  
   - ENG-141  
   - COM-143 or COM-105

2. **MATHEMATICS – SCIENCE – TECHNOLOGY**  
   Must complete 9 credits as specified by category:
   - **A. Mathematics (3-6 credits)**  
     - MAT-110
     - MAT-141
     - MAT-131
   - **B. Science (4-8 credits)**  
     - BIO-145
     - BIO-150
     - BIO-162
     - BIO-163
     - BIO-165
     - BIO-170
     - BIO-176
     - BIO-262
     - CHE-110
     - CHE-164
   - **C. Technology (0-4 credits)**  
     - CSC-102
     - CSC-103
     - CSC-112

3. **SOCIAL SCIENCE – HUMANITIES**  
   Must complete a total of 9 credits from A & B with at least 3 credits in each category:
   - **A. Social Science (3-6 credits)**  
     - ANT-289
     - ECO-188
     - ECO-189
     - GEO-105
     - POL-101
     - POL-115
     - POL-201
     - PSY-175
     - SOC-103
     - SOC-202
   - **B. Humanities (3-6 credits)**  
     - ART-101
     - ART-105
     - ART-106
     - ART-107
     - ENG-199
     - ENG-201
     - ENG-202
     - ENG-240
     - ENG-241
     - ENG-242
     - FOR-101
     - FOR-103
     - FOR-133
     - FOR-151
     - FOR-201
     - FOR-251
     - HIS-101
     - HIS-102
     - HIS-113
     - HIS-114
     - HIS-220
     - HIS-225
     - HIS-250
     - HIS-260
     - MUS-191
     - MUS-211
     - PHI-101
     - PHI-102
     - PHI-103
     - PHI-204
     - PHI-261
     - THE-193

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COMPUTER AND INFORMATION SCIENCE  
Associate in Science in Computer and Information Science

The Associate in Science, Computer and Information Sciences Option is designed to parallel the first two years of a baccalaureate computer information systems or computer science-related degree program. The studies include computer programming, introductory computer architecture, mathematics, and general education courses.

Upon completion of the associate degree and a baccalaureate program, students will be prepared for a variety of sophisticated positions in the computer field as an applications/systems programmer, programmer/analyst, or software developer. Depending on student scheduling and availability, this program may be completed in two years of full-time study with day and evening classes or in three to five years of part-time evening study.

**Elective Categories:**

Students may select courses from any of the disciplines listed below each category to fulfill any remaining degree requirements above and beyond their General Education Requirements.

**SOCIAL SCIENCE:**
ANT  CRJ  ECO  POL  PSY  SOC

**HUMANITIES:**
ART  COM  FOR  ENG*  HIS  MUS  PHI  THE
* Literature Elective must be ENG-199, 201, 202, 205, 240, 241, 242, 244, 245

**BUSINESS:**
ACC  BUS  COM121  CSC  ECO  GRD  LST

**LIBERAL ARTS:**
ANT  ART  BIO  COM  CHE  CRJ  ECO  ENG*  FOR  HIS  MAT  MUS  PHI  PHY  POL  PSY  SOC  THE
* Literature Elective must be ENG-199, 201, 202, 205, 240, 241, 242, 244, 245

**FREE:**
Any college-level (100+) course that is not required as part of the degree program