COMPUTER SCIENCE: PROGRAMMING
Associate in Science Degree

Program Description
The Computer Science Program is a program that is designed to prepare students for a variety of entry level positions in a networked environment within the computer science industry, and to provide additional training or further advancement to those already employed in the computer science profession. The program design includes the core curriculum, a general computer science core, skills courses, and courses specific to the computer science areas.

Program Outcomes
At the completion of this program, the student should be able to:
- Summarize how computers, data processing, and networking have changed practices in society, business, science and medicine.
- Describe the role of major hardware and software components of a computer.
- Apply structured methodologies to design, implement, document, test, and debug computer programs.
- Differentiate between procedural and object-oriented programming.
- Evaluate and implement various data structures to solve coding problems.
- Design a relational database with queries, forms, and reports.
- Describe the technologies used in computer networks.

### The College Core Requirements
- Computer Science Core
- ENG 101 English Composition I
- ENG 102 English Composition II*
- History/Government Core
- IDS 167 First Year Seminar
- MAT 103 College Algebra
- PHY 111 General Physics I w/Lab*
- Social Science/Psychology Core

### Program Requirements
- CSA 213 Database Management
- CSI 116 Introduction to Programming
- CSI 107 C++ Programming*
- CSI 108 Advanced C++*
- CSI 218 Data Structures*
- CSI 226 UNIX with Linux
- CSI 244 Networking I
- Program Electives

### Total credits required for graduation

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACC 101 Accounting I</td>
<td>3</td>
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<tr>
<td>CSA 217 Spreadsheet Design for Business</td>
<td>3</td>
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<tr>
<td>CSI 116 Introduction to Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSI 107 C++ Programming*</td>
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<td>Program Electives</td>
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*Indicates course requires the completion of a prerequisite.