Programming and App Development

Thomas Gallagher, Program Director

Programming and App Development concentration emphasizes application development and business processes. Students learn to write software using an object-oriented programming paradigm for deployment to the web and the desktop. Relational database design, structured query language (SQL), and the ability to create applications which push and pull information from databases are highlighted. Graduates seek careers as computer support specialists, help desk technicians, web developers, software developers, and database administrators.

Associate of Applied Science - Information Technology; Programming and App Development Concentration

Missoula College

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Information Technology Core Courses 28
Mathematics 3
Programming and App Development Option Requirements 23
Programming and App Development Directed Electives 6
Total Hours 60

Information Technology Core Courses

Rule: All courses are required

Note: Completion of IT core courses fulfills requirements for CAS in computer support.

BGEN 105S Introduction to Business 3
CSCI 105 Computer Fluency 3
CSCI 135 Fund of Computer Science I 3
CSCI 172 Intro to Computer Modeling 3
ITS 150 CCNA 1: Exploration 3
ITS 165 OS Commands and Scripts 3
ITS 210 Network OS - Desktop 3
ITS 280 Computer Repair & Maint. 3
ITS 289 Professional Certification 1
WRIT 101 College Writing I 3
Total Hours 28

Minimum Required Grade: C-

Mathematics

Rule: Any Mathematics course level 115 or higher

Programming and App Development Concentration Requirements

Rule: All courses are required

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMX 111A</td>
<td>Intro to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 113</td>
<td>Programming with C++ I</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 136</td>
<td>Fund of Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 215E</td>
<td>Social &amp; Ethical Issues in CS</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 221</td>
<td>System Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 240</td>
<td>Databases and SQL</td>
<td>3</td>
</tr>
<tr>
<td>ITS 298</td>
<td>Internship/Cooperative Educati</td>
<td>2</td>
</tr>
<tr>
<td>MART 232</td>
<td>Interactive Web II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 23

Minimum Required Grade: C-

Programming and App Development Directed Electives

Rule: Required; take a minimum of 6 credits

Note: Student must select at least two directed elective courses (minimum of 6 credits). Directed electives must be approved by student's advisor. Examples of directed electives may include courses from the ACTG, BGEN, COMX, CSCI, DSN, ITS, or WRIT rubrics. A student may request substitution of other courses to fulfill the directed elective requirement provided a clear connection can be made between a course, a student's career objective, and the degree program. All substitution requests require departmental approval.

Minimum Required Grade: C-