SOFTWARE DEVELOPMENT, ASSOCIATE OF SCIENCE - WEB DEVELOPMENT

Program Code: 2195B
Career Pathway: Science, Technology, Engineering, and Math

Location(s): Courses for this program are offered at all BC locations. (https://www.broward.edu/about/locations/) This program is also offered fully online.

Program Entrance Requirements: HS Diploma or GED

Program Description: The Associate in Science Degree Software Development – Computer Programming & Analysis is designed to prepare students for the dynamic world of application and web development. Students will use current technology to learn procedural and object-oriented programming or well as web design including client-side and server-side scripting. The program will culminate with a capstone course in which students will work on a hands-on group project that can be used in their portfolios.

a. Information Technology Support Specialist, Technical Certificate 6337
b. Front-End Web Specialist, Technical Certificate 6333
c. Web Programming Specialist, Technical Certificate 6334
d. Software Development, Associate of Science - Web Development 2195B
e. Bachelor of Applied Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>6337</th>
<th>6333</th>
<th>6334</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101</td>
<td>COMPOSITION I</td>
<td>3.00</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CGS1060C</td>
<td>COMPUTER AND INTERNET LITERACY</td>
<td>3.00</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Speech</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COP1000C</td>
<td>INTRODUCTION TO COMPUTER PROGRAMMING</td>
<td>3.00</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CTS1133C</td>
<td>A+ COMPREHENSIVE</td>
<td>4.00</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CTS1134C</td>
<td>NETWORK+</td>
<td>4.00</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Mathematics Core 1</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTS1831C</td>
<td>WEB AUTHORING I</td>
<td>4.00</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CIS1513C</td>
<td>PROJECT MANAGEMENT</td>
<td>4.00</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>COP1700C</td>
<td>INTRODUCTION TO DATABASE AND MYSQL</td>
<td>3.00</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Humanities Core</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTS2852C</td>
<td>CLIENT-SIDE SCRIPTING</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTS1861C</td>
<td>WEB AUTHORING II</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTS212C</td>
<td>ADOBE PHOTOSHOP</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Natural Science Core</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTS3870C</td>
<td>SERVER-SIDE SCRIPTING</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMH2020</td>
<td>HISTORY OF THE UNITED STATES SINCE 1877</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or POS2041</td>
<td>NATIONAL GOVERNMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math or Internship or IT Elective 2</td>
<td></td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>60</strong></td>
<td><strong>18</strong></td>
<td><strong>18</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

1. MAC1105C COREQUISITE COLLEGE ALGEBRA is a 5-credit course. Students who register for this course must see an advisor to discuss their academic plan.
2. Any course with a computing prefix.

Notes:

Students should complete all Core Computing Requirements before completing specialization courses.
In addition to the courses marked, students must also complete 10 additional credits to earn TC 6337. Students may choose from the program electives beginning with CET, CIS, COP, CTS, CGS, or ISM.

See General Education course information here (https://catalog.broward.edu/programs-study/aa-general-education-graduation-requirements/).

In accordance with Florida Statute and Florida Administrative Code, students may need to satisfy the Civic Literacy Graduation Requirement. Visit the Civic Literacy Graduation Requirement page at broward.edu/civic-literacy (https://students.broward.edu/resources/civic-literacy/).

Students are strongly encouraged to meet with an advisor (https://students.broward.edu/resources/advising/) to create a personalized educational plan.

Program Highlights
Credit for Prior Learning
Accelerate your path to completion with these options:

- Credit by exam
- Prior Learning Assessment
- Earned industry certifications
- And much more...

Related Industry Certifications
Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:

- CIW Advanced HTML5 and CSS3 Specialist
- CIW JavaScript Specialist
- CIW Database Design Specialist
- PCEP - Certified Entry-Level Python Programmer
- C++ Certified Associate Programmer (CPA)
- Project+

Get an Internship
Completion of the degree requires PSC4912 INDEPENDENT RESEARCH IN THE PHYSICAL SCIENCES or PSC4948 SENIOR INTERNSHIP for Physical Science concentration. After completing your first year of coursework make sure to visit Employment Solutions (https://broward.edu/career/) for internship opportunities and helpful tools like virtual job shadow, to help take your career to the next level!

- Get an Internship (http://broward.edu/studentresources/career/Pages/Find-a-job-or-internship.aspx)
- Virtual Job Shadow Tool (http://www.broward.edu/studentresources/career/Pages/default.aspx)

Median Wage and Job Growth Outlook
Broward College has Career Coach (https://www.broward.edu/careercoach/)! It is designed to help you find a good career by providing the most current local data on wages, employment, job postings, and associated education and training.

Fund Your Education
This Program is Financial Aid (https://www.broward.edu/admissions/financial-aid/) eligible. Scholarships (https://www.broward.edu/admissions/financial-aid/scholarships/) may be available. This program is part of the Career Source Broward ITA List (http://careersourcebroward.com/).

Program Learning Outcomes
Graduates from this program will:

- Demonstrate an object-oriented approach to system development.
- Analyze a system problem and design a software-based solution.
- Design and code robust, structured, well-documented programs to solve complex problems.
- Demonstrate an understanding of basic computer programming concepts including the use of decisions and conditional loops in a working program.
- Demonstrate the ability to write an interactive, fully functioning program that uses functions and allows for code re-use.
- Create an interactive program consisting of input/output, loops, selection structures, and functions.
- Plan and execute dynamic interaction to otherwise static web pages using a scripting language.
- Summarize the properties of a project and classify project roles and responsibilities.