

# WEB DEVELOPMENT - ASSOCIATE OF APPLIED SCIENCE OPTION (AASO)

## Description

The Computer Information Systems program is designed around a core curriculum and three distinct options. The program's core provides an introduction to computer concepts, software applications, operating systems, networking, database, computer servicing, internet, math, human relations, and writing. Graduates work in information technology for a wide variety of commercial businesses, education, federal/state/local governments, e-commerce, publishing and real estate. Careers typically include positions such as personal computer technician, desktop support, network administrator, web developer, draftsman, database administrator, system administrator, and related managerial and administrative roles.

The Web Development Associate of Applied Science Option prepares students for a career as a web developer or website administrator. These professionals are responsible for creating standards-based websites and web/database applications. In addition to programming skills in common markup, scripting, and SQL languages, these professions require project management and communication skills.

## Program Learning Outcomes

Upon successful completion of the program, students will be able to:

1. Construct websites that demonstrate best practices for function, design, and usability.
2. Integrate functional client-side programs within a website.
3. Develop effective server-side programs.
4. Communicate effectively with clients, customers, and coworkers about web development topics.

## Entrance Requirements

### Academic Entrance Requirements

Recommended:

- High school diploma or GED
- Completion of WR 065 Rhetoric and Critical Thinking II or higher or minimum placement Wr/Comm Level 7
- Completion of MTH 060 Beginning Algebra or higher or minimum placement Math Level 10
- Basic computer competency or CIS 010 Computer Keyboarding and CIS 070 Introduction to Computers: Windows

## Additional Program Costs (beyond standard tuition/fees and textbooks)

### Material Costs

Recommended:

- A desktop or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office: approximately \$800

## Course Requirements

Course	Title	Credits
<b>Core Courses</b>		
CIS 101	Information Technology Orientation	3
CIS 122	Introduction to Programming	4
CIS 124	IT Fundamentals	4
CIS 131	Software Applications	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
CIS 178	Internet in Depth	4
or CIS 179CL	Cloud Essentials	
CIS 179	Networking Essentials	4
CIS 195	Web Development I	4
CIS 244	Information Systems Analysis	4
CIS 279WC	Windows Client	4
or CIS 179L	Linux Essentials	
CIS 297	CIS Professional Capstone	4
<b>Web Development Option</b>		
Choose a minimum of 27 credits from the following:		27-28
CIS 125G	Photoshop	
or CIS 125I	Adobe Illustrator	
CIS 125DV	Digital Video Productions	
or CIS 125W	Web Animation	
CIS 133JS	Introduction to JavaScript	
CIS 133P	Introduction to PHP	
CIS 197	CMS Web Development: WordPress	
CIS 233P	Web Programming	
CIS 280	Co-op Work Experience CIS	
CIS 295	Web Development II	
<b>Other Required Courses</b>		
BA 214	Business Communications	3-4
or WR 227	Technical Writing	
COMM 111	Fundamentals of Public Speaking	3-4
or COMM 218	Interpersonal Communication	
or COMM 219	Small Group Communication	
<b>Human Relations:</b>		3-4
MTH 102	Applied Technical Mathematics (or one course from the foundational requirements math list)	4
WR 121	Academic Composition	4
<b>Total Credits</b>		<b>95-99</b>

## Advising Notes

Planning is important. Most option courses are offered once per academic year and many need to be taken in sequence. Some core classes are offered once every two years. Students may take non-program support courses any term to build skills related to prerequisites.

This program is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

## Performance Standards

- Academic Requirements:
  - Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
  - All courses in the program must be completed with a grade of C or higher.
- Additional Requirements:
  - All COCC students enrolled in the Computer Information Systems program (which includes requirements for Cooperative Work Experience) may have to pass Criminal History Checks (CHC) as a condition of their acceptance into a work site. Students who do not pass the CHC may not be eligible to complete requirements at affiliated practicum sites or be hired for some professional positions. Students who believe their history may interfere with their ability to complete the program of study should contact the program director.

CIS 195	Web Development I	4
<b>Credits</b>		<b>16</b>
<b>Fifth Term</b>		
CIS 133P	Introduction to PHP	4
CIS 179L or CIS 279WC	Linux Essentials or Windows Client	4
CIS 197	CMS Web Development: WordPress	4
CIS 244	Information Systems Analysis	4
<b>Credits</b>		<b>16</b>
<b>Sixth Term</b>		
CIS 125WA or CIS 125DV	Web Animation or Digital Video Productions	4
CIS 233P	Web Programming	4
CIS 295	Web Development II	4
CIS 297	CIS Professional Capstone	4
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>96-99</b>

## Sample Plan

<b>First Term</b>		<b>Credits</b>
CIS 101	Information Technology Orientation	3
COMM 111 or COMM 218 or COMM 219	Fundamentals of Public Speaking or Interpersonal Communication or Small Group Communication	3-4
MTH 102	Applied Technical Mathematics (or one course from the foundational requirements math list)	4
WR 121	Academic Composition	4
<b>Credits</b>		<b>14-15</b>
<b>Second Term</b>		
BA 214 or WR 227	Business Communications or Technical Writing	3-4
CIS 124	IT Fundamentals	4
CIS 125G or CIS 125I	Photoshop or Adobe Illustrator	4
CIS 178 or CIS 179CL	Internet in Depth or Cloud Essentials	4
<b>Credits</b>		<b>15-16</b>
<b>Third Term</b>		
CIS 122	Introduction to Programming	4
CIS 131	Software Applications	4
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
<u>Human Relations:</u>		3-4
<b>Credits</b>		<b>19-20</b>
<b>Fourth Term</b>		
CIS 133JS	Introduction to JavaScript	4
CIS 135DB	Database Theory/SQL	4
CIS 179	Networking Essentials	4