



Computer Programming and Web Development

Program: Computer Information Systems

Program Code:

CI_CPW

Academic Area:

Science, Technology, Engineering and Mathematics

Type:

Associate in Science

CIP Code:

52.1202

Program Statement

Students will be prepared for entry-level programming in business and industry including the option of focusing on web development. They will develop the skills to analyze problems and develop computerized solutions using multiple programming and/or web development options. They will develop the knowledge to work with data analysis and develop and maintain effective programs and/or websites.

Program Information

- Students have access to outstanding state-of-the-art technology and learn from faculty in touch with the needs of industry, both locally and nationally. Courses are constantly evolving to reflect current trends.
- Students who have earned credit at other institutions may be able to obtain transfer credit. Transfer credit approval for any Computer Information Systems (CIS or CIT) course must be approved by the Department Chair or by a full-time faculty member in the department.
- This concentration can be taken online.

After Bristol

- Programming Track: Recent graduates have successfully started their own businesses or gone to work as programmers, programmer analysts, systems administrators, systems analysts, software developers, technicians, and consultants.
- Web Track: Students graduating from this track will be prepared to develop and maintain websites. Students either join a web development firm or do consulting.

Degree Requirements



General Courses

Course #	Title	Credits
BUS 115	Fundamentals of an Enterprise	1
ENG 101	Composition I: College Writing	3
ENG 102	Composition II: Writing about Literature	3
	History Elective	3
	COM 104 or COM 114	3
	MTH 131 or MTH 172	3-4

General Electives

Course #	Title	Credits
	CIS Ethical Dimensions Elective	0-3
	CIS Global and Historic Awareness Elective	0-3
	CIS Multicultural and Social Perspectives Elective	0-3
	Multicultural and Social Perspectives Elective	3
	Science Elective	3-4

Program Courses

Course #	Title	Credits
CIS 105	Hardware Fundamentals	1
CIS 120	Programming: Logic, Design and Implementation	3
CIS 121	Operating Systems	3
CIS 150	Oracle and SQL	3
CIS 272	Program Development Seminar	3
CIT 102	Security Awareness	1

Programming or Web Track

Choose one of the following tracks:

Course #	Title	Credits
	Programming Track	27-31
	Web Track	21-24



Recommended Course Sequence - Semester 1

Course #	Title	Credits
CIS 120	Programming: Logic, Design and Implementation	3
CIS 121	Operating Systems	3
ENG 101	Composition I: College Writing	3
	MTH 131 or MTH 172	3-4
	Programming/Web Track Elective	3-4

Recommended Course Sequence - Semester 2

Course #	Title	Credits
ENG 102	Composition II: Writing about Literature	3
	COM 104 or COM 114	3
	Programming/Web Track Elective	3-4
	Programming/Web Track Elective	3-4
	Programming/Web Track Elective	3-4

Recommended Course Sequence - Semester 3

Course #	Title	Credits
CIS 150	Oracle and SQL	3
	History Elective	3
	Programming/Web Track Elective	3-4
	Programming/Web Track Elective	3-4

Recommended Course Sequence - Semester 4

Course #	Title	Credits
CIS 272	Program Development Seminar	3
	Programming/Web Track Elective	3-4
	Programming/Web Track Elective	3-4
	Science Elective	3-4
	Multicultural and Social Perspectives Elective	3
	Total credits:	60-66

Category Descriptions

History Elective

Credits: 3



Choose one of the following:

Course #	Title	Credits
HST 111	The West and the World I	3
HST 112	The West and the World II	3
HST 113	United States History to 1877	3
HST 114	United States History from 1877	3
HST 115	Twentieth Century Social History-1919 to the Present	3

COM 104 or COM 114

Credits: 3

Choose one of the following:

Course #	Title	Credits
COM 104	Fundamentals of Public Speaking	3
COM 114	Professional Speaking	3

MTH 131 or MTH 172

Credits: 3-4

Choose one of the following:

Course #	Title	Credits
MTH 131	Elements of College Mathematics	3
MTH 172	Precalculus with Trigonometry	4

CIS Ethical Dimensions Elective

Credits: 0-3

Choose an Ethical Dimensions elective.

CIS Global and Historic Awareness Elective

Credits: 0-3

Choose a Global and Historic Awareness elective.

CIS Multicultural and Social Perspectives Elective

Credits: 0-3



Choose a Multicultural and Social Perspectives elective.

Multicultural and Social Perspectives Elective

Credits: 3

Choose one Multicultural and Social Perspectives elective.

Science Elective

Credits: 3-4

Choose one MassTransfer Science elective.

Programming Track

Credits: 27-31

Course #	Title	Credits
	Programming Language Sequence Electives	12-14
	Programming CIS/CIT Electives	15-17

Web Track

Credits: 21-24

Course #	Title	Credits
	Web Language Sequence Electives	12
	Web CIS/CIT Electives	9-12