



# Web Development - Associate in Applied Science (2020-21 Catalog)

## SEMESTER-BY-SEMESTER PROGRAM MAP FOR FULL-TIME STUDENTS

Courses are listed in preferred order of completion

Plans can be modified to fit student needs by adding more semesters

**Choose your courses with your Advisor.**

<b>Developmental Education Courses (if required)</b>			<input type="checkbox"/>	MATH020	Pre-Algebra
<input type="checkbox"/>	ACLS050	Introduction to Academic Literacy	<input type="checkbox"/>	MATH022	Elementary Algebra
<input type="checkbox"/>	ENGL027	Writing Skills Workshop	<input type="checkbox"/>	MATH026	Intermediate Algebra

Location: B= BETH, M= MROE, S=SBTH, E= ESTN, D= DIST \*subject to change

complete	Course #	Course Title	Credits	Gen Ed	Fall	Winter	Spring	Summer	Pre-requisites / Co-requisites
Semester 1	<input type="checkbox"/>	COLS101	College Success	1		B, M, D	----	B, M, D	D
	<input type="checkbox"/>	ARTA170	Computer Graphics	4		B, M, D	----	B, M, D	D
	<input type="checkbox"/>	CISC100	Introduction to Technology Fundamentals	4	CL	B, M, D	----	B, D	D
	<input type="checkbox"/>	CMTH102	Introduction to Communication	3	Comm	B, M, D	----	B, M, D	B, M, D
	<input type="checkbox"/>	ENGL101	English I	3	Comm	B, M, D, E	----	B, M, D, E	B, M, D
	<input type="checkbox"/>		AH, SIT, SSHB General Ed. Elective	3	AH,SIT,SSHB	B, M, D	----	B, M, D	B, M, D
		Total Semester Credits:	18						
Semester 2	<input type="checkbox"/>	ARTA130	Introduction to Web Design	3		B, M, D	----	B, D	----
	<input type="checkbox"/>	ARTA180	Digital Design & Typography I	3		----	----	B	----
	<input type="checkbox"/>	CISC128	Client-Side Scripting	4		B, M	----	B	D
	<input type="checkbox"/>	ENGL151	English II (L, T, or R)	3	Comm	B,M,D	----	B,M,D	B, M, D
	<input type="checkbox"/>	MATH	Mathematics Elective	3	QL	B, M, D	D	B, M, D	B, M, D
		Total Semester Credits:	16						
Semester 3	<input type="checkbox"/>	ARTA132	Web Animation	3		B, D	----	D	----
	<input type="checkbox"/>	ARTA240	Advanced Web Site Design	3		B, M	----	B	----
	<input type="checkbox"/>	CISC257	Server-Side Scripting	4		B	----	B	----
	<input type="checkbox"/>	CISC270	Database Systems	4		B	----	B, M	----
	<input type="checkbox"/>		AH, SIT, SSHB General Ed. Elective	3	AH,SIT,SSHB	Depends			
		Total Semester Credits:	17						
Semester 4	<input type="checkbox"/>	CISC208	Mobile Development	4		----	----	B	----
	<input type="checkbox"/>	CISC150	Object-Oriented Programming	4		----	----	B	----
	<input type="checkbox"/>	CISC201	Advanced Web Technologies	4		----	----	B	----
	<input type="checkbox"/>		AH, SIT, SSHB General Ed. Elective	3	AH,SIT,SSHB	B, M, D	----	B, M, D	B, M, D
	<input type="checkbox"/>		Elective	3		B, M, D	----	B, M, D	B, M, D
		Total Semester Credits:	18						
		Total Degree Credits	69						

### General Education Requirements

<input type="checkbox"/>	Diversity
<input type="checkbox"/>	Writing Intensive

### Notes:

Students have a choice of ENGL 151L (Literature option), ENGL151R (Report Writing) or ENGL 151T (Technical Writing). Contact your advisor for guidance.

For the General Education Electives, students must take three courses from at least two of the following areas: Arts & Humanities (AH); Social Science: Society and Institutions over Time (SIT) or Social Science: Scientific Study of Human Behavior (SSHB).

**\*It is the student's responsibility to be knowledgeable of NCC graduation requirements and to verify transfer requirements with the 4-year institution. Courses listed on the program map are based upon the assumption that prerequisites and courses taken in previous semesters will be successfully completed**

Arts & Humanities (AH)
ARTA 100 Art and Visual Thinking
ARTA 101 Art History Survey
CMTH 110 Introduction to the Theatre
CMTH 111 Acting I
CMTH 115 Technical Theatre
CMTH 117 Stagecraft
CMTH 126 The Communication Arts
CMTH 189 Stage Voice and Movement
CMTH 190 Stage Production
CMTH 206 Directing
CMTH 211 Plays: Classical to Contemp. (G-WI)
CMTH 212 Acting II
CMTH 218 Theatre Portfolio
CMTH 220 Introduction to Film
DANC 101 Dance History
DANC 110 Ballet I
DANC 120 Modern Dance I
DANC 130 Jazz I
DANC 210 Ballet II
DANC 220 Modern Dance II
DANC 230 Jazz II
ENGL 201 British Literature I (G-WI)
ENGL 203 Shakespeare (G-WI)
ENGL 205 American Literature I (G-WI)
ENGL 211 Plays: Classical to Contemp. (G-WI)
ENGL 215 Multicultural Adolescent Lit (G-WI)
ENGL 250 Latin American Literature (G-WI)
ENGL 251 British Literature II (G-WI)
ENGL 253 Creative Writing
ENGL 255 American Literature II (G-WI)
ENGL 256 Modern Poetry (G-WI)
ENGL 257 20th Century Lit by Women (G-WI)
ENGL258 Fiction Writing
ENGL 260 Contemporary Literature (G-WI)
ENGL 264 Irish Literature (G-WI)
ENGL 265 African-American Literature (G-WI)
ENGL 267 Poetry Writing
HUMA 121 The American Work Experience (G-WI)
HUMA 140 Intro to Women & Gender Studies (G-WI)
HUMA 150 Nature of the Environment
HUMA210 Creativity and the Origin of Ideas
JOUR 101 Journalism and Society
Modern Language - All MDLA Courses
MUSC 101 Introduction to Music
PHIL 111 On Death and Dying (G-WI)
PHIL 121 World Religions
PHIL 201 Introduction to Philosophy
PHIL 202 Ethics and Moral Problems (G-WI)
PHIL 204 Asian Philosophies
PHIL 211 Ancient Philosophy
PHIL 215 Modern Philosophy
PHIL 225 What is Freedom?

Societies & Institutions Over Time (SIT)
CMTH 221 History of Broadcasting
GEOG 101 World Geography
GEOG 151 Geography of the U.S. and Canada (G-WI)
GLBL 130 Intro to Global Studies
GLBL 160 Field Experience & Acad Research in GS
GLBL 230 Global Studies Capstone
HIST 103 Ancient and Medieval History
HIST 113 American History I (G-WI)
HIST 121 The Black Experience (G-WI)
HIST 123 African Civilization
HIST 140 Modern Chinese History
HIST 153 Found of Mod Euro History, 1300-1815 (G-WI)
HIST 163 American History II
HIST 165 The American Experience of Warfare (G-WI)
HIST 166 Civil War and Reconstruction (G-WI)
HIST 168 History of the Middle East (G-WI)
HIST 173 Mod European History, 1815 to Present (G-WI)
HIST 183 Modern American History 1945-Present
HIST 210 History of Mod Science, 1859 to Present
HIST 211 History of Pennsylvania
INTS 201 Implementing Sustainable Energy System...
INTS 202 The Architecture of the City: Classic to Contemp.
POLS 101 Introduction to Political Science
POLS 105 American Constitutional Law (G-WI)
POLS 110 American National Government (G-WI)
POLS 150 Peace Studies & Conflict Res (Study Abroad)
POLS 170 Politics of Modern Turkey (Study Abroad)
POLS 202 International Relations
POLS 205 Women and Politics (G-WI)
POLS 251 State and Local Government (G-WI)
SOCA 102 Cultural Anthropology (G-WI)
SOCA 105 American Ethnicity
SOCA 160 Issues in Contemp.Genocide & Mass Violence

Quantitative Literacy (QL)
MATH 150 Introductory Statistics (D)
MATH 140 College Algebra
MATH 145 Trigonometry
MATH160 PreCalculus
MATH 165 Applied Calculus
MATH 175 Calculus with Review (part 1)
MATH 176 Calculus with Review (part 2)
MATH 180 Calculus I
MATH 181 Calculus II
MATH 202 Discrete Math
MATH 210 Calculus III
MATH 211 Differential Equations

Electives for AAS Degree
All courses except: OXX-level courses, EARL221, 222

Suggested elective choices:  
 BUSA 232 Principles of Marketing or  
 ARTA 181 Digital Design and Typography II

Diversity (D) Electives
BIOS126 Environmental Science
BIOS210 Environmental Biology
BUSA115 Intro to International Business
CJST250 Contemporary Issues in Criminal Justice
CMTH126 The Communication Arts
CMTH211 Plays: Classical to Contemporary
CMTH215 Intercultural Communication
DANC101 Dance History
ENGL151L English II (Literature)
ENGL205 American Literature I
ENGL211 Plays: Classical to Contemporary
ENGL215 Multicultural Adolescent Literature
ENGL250 Latin American Literature
ENGL251 British Literature II
ENGL253 Creative Writing
ENGL255 American Literature II
ENGL256 Modern Poetry
ENG 257 20th Century Lit by Women
ENGL260 Contemporary Literature
ENG 264 Irish Literature
ENGL 265 African-American Literature
ENGL 267 Poetry Writing
GEOG 101 World Geography
GEOG 121 Environmental Sustainability
GEOG 151 Geography of the U.S. and Canada
GEOG 210 Weather and Climate
GLBL 130 Intro to Global Studies
GLBL 160 Field Experience & Acad Research in GS
GLBL 230 Global Studies Capstone
HIST 113 American History I
HIST 121 The Black Experience
HIST 140 Modern Chinese History
HIST 165 The American Experience of Warfare
HIST 166 Civil War & Reconstruction
HIST 168 History of the Middle East
HIST 173 Mod Euro History: 1815-Present
HIST 183 Modern American History 1945-Present
HUMA 121 American Work Experience
HUMA 140 Intro to Women and Gender Studies
HUMA 150 Nature of the Environment
HUMA210 Creativity and The Origin of Ideas
INTS 201 Implement Sustain Energy Sys in Dev Com
Modern Language - All MDLA Courses
PHIL111 On Death and Dying
PHIL 121 World Religions
PHIL 204 Asian Philosophies
POLS 101 Introduction to Political Science
POLS 105G American Constitutional Law
POLS150 Peace Studies & Conflict Resolution (Study Abroad)
POLS 202 International Relations
POLS205 Women & Politics
POLS 251 State & Local Government
PSYC 258 Developmental Psychology
SOCA 102 Cultural Anthropology
SOCA103 Principles of Sociology
SOCA 105 American Ethnicity
SOCA 150 Deviance
SOCA160 Issues in Cont Genocide & Mass Violence
SOCA204 Social Problems

Writing Intensive Gen Ed Courses (WI)
BIOS105G Contemporary Biology
CMTH 211G Plays: Classical to Cont
ENGL 201G British Literature I
ENGL 203G Shakespeare
ENGL 205G American Literature I
ENGL 211G Plays: Classical to Contemporary
ENGL 215G Multicultural Adolescent Literature
ENGL 250G Latin American Literature
ENGL 251G British Literature II
ENGL 255G American Literature II
ENGL 256G Modern Poetry
ENGL 257G 20th Century Lit by Women
ENGL 260G Contemporary Literature
ENGL 264G Irish Literature
ENGL 265G African-American Literature
GEOG 121G Environmental Sustainability
GEOG 151G Geography of the US & Canada
HIST 113G American History I
HIST 121G The Black Experience
HIST 153G Found of Mod Euro Hist (1300-1815)
HIST 166G Civil War and Reconstruction
HIST 168G History of the Middle East
HIST 173G Mod Euro History, 1815 to Present
HUMA 121G The American Work Experience
HUMA 140G Intro to Women & Gender Studies
HUMA250G Research Methods in the Social Sciences
PHIL 111G On Death and Dying
PHIL 202G Ethics and Moral Problems
POLS 105G American Constitutional Law
POLS 110G American National Government
POLS 205G Women and Politics
POLS 251G State and Local Government
PSYC 103G Introduction to Psychology
PSYC 258G Developmental Psychology
SOCA 102G Cultural Anthropology
SOCA 103G Principles of Sociology
SOCA 125G Sociology of Families

Scientific Study of Human Behavior (SSHB)
ECON 201 Macroeconomics
GEOG 121 Environmental Sustainability (G-WI)
GEOG 140 Investigating Climate Change )
GEOG 271 Intro to Geographic Info Systems
HUMA 250 Research Methods in Social Sciences (G-WI)
INTS 250 Study Abroad
PSYC 103 Introduction to Psychology (G-WI)
PSYC 205 Research Methods
PSYC 230 Introduction to Health Psychology
PSYC 235 Dev Child Psychopathology
PSYC 245 Cognitive Psychology
PSYC 255 Abnormal Psychology
PSYC 258 Developmental Psychology (G-WI)
PSYC 265 Psychology of Sex and Gender
SOCA 103 Principles of Sociology (G-WI)
SOCA 125 Sociology of Families (G-WI)
SOCA 210 Sociology of Gender

**Program Narrative:**

- Websites are indispensable tools for every aspect of business. If you're interested in being a part of this growing field of employment, you will want to secure the right set of skills. Attractive job candidates have the ability to design the look of a website and also to program the technical aspects that provide an interactive feel. We have designed our Web Development program to train students for both the creative and technical sides of the job.
- Our program is geared toward gaining employment upon graduation, rather than transferring to a four-year college. Upon graduation, students will be equipped with the skills to qualify for positions such as web developer, web programmer, web designer, interactive web developer, web application developer, and director of web services..

**Program Learning Outcomes:**

- Develop effective approaches to solving problems related to web site development.
- Analyze user needs to determine technical requirements for web site creation.
- Design, build, and/or maintain aesthetically pleasing web sites using WYSIWYG editors and graphic design tools, with a focus on usability.
- Develop proficiency with programming, scripting languages, and database design techniques needed for interactive dynamic web applications.
- Exhibit proficiency in both design and technical aspects of web design.