

## WEB DEVELOPMENT AND DESIGN, Associate in Arts Degree - 1810

### *Technology Division*

The Web Development and Design A.A. career degree provides skills and knowledge needed for a rewarding career designing and developing enterprise level web sites and applications. All students gain a foundation in web site development and design, various web technologies, web marketing, and effective communication. Students then choose either a developer or designer option. Developer graduates focus on programming to build and maintain interactive, data driven web applications. Designer graduates focus on making creative content using rich media.

### *Career Opportunities*

Graduates may obtain positions with many different businesses, government agencies, and web consulting firms as Web developers, Web designers, Webmasters, Web architects, programmers, and other related positions.

### *Competency Profile*

This curriculum is designed to prepare students to:

- Design high quality web pages for a variety of uses
- Develop web applications that integrate programming, databases, and markup languages for business and electronic commerce
- Implement and maintain web sites that are effective in terms of cost, security, and reliability
- Configure web servers and operating systems
- Publish information on the Internet and Intranets
- Create interactive and multimedia content for marketing
- Manage Internet communication for organizations
- Make cost-effective decisions regarding Internet technology, software, and hardware
- Write and speak effectively
- Appreciate accomplishments in the arts and sciences
- Understand how their specialized training fits into the larger management and societal contexts

### **PROGRAM REQUIREMENTS (TOTAL CREDITS = 64)**

<b>General Education</b>		<b>Major</b>	
ENGL 101 English Composition I	3	AOS 202 Project Management <b>or</b>	
ENGL 102 English Composition II <b>or</b>		MGMT 227 Project Management	3
ENGL 104 Report & Technical Writing <b>or</b>		WEB 110 Web Site Publishing	3
ENGL 106 Written Business Comm.	3	WEB 125 HTML, XML, and JavaScript	3
SPCH 101 Effective Speaking <b>or</b>		WEB 130 Web Design and Multimedia	3
SPCH 104 Interpersonal Communication	3	WEB 143 Web Application Development	3
Core A Elective	3	WEB 268 Capstone Web Project	3
Core B Elective	3	Computer Elective*	3
Core C Elective	3	Major Elective**	3
Free Elective	3		24
Physical Education & Wellness	1		
	22		

\*Computer Elective: Any WEB, CIS, CISE, CPS, CNT or GIS course

\*\* Major Elective- 3 credits from the following courses: ART 105, MKTG 201, MKTG 235, MGMT 121 or MGMT 201

**Developer Option**

CIS 245 Database Programming	3
WEB 126 XML eXtensible Markup Language	3
WEB 240 JavaScript Programming	3
WEB 253 ASP.NET Active Server Pages	3
WEB 260 Web Server Administration <u>or</u>	
CIS 223 Intermediate Windows Servers <u>or</u>	
CIS 264 Fundamentals of LINUX Administration <u>or</u>	
CIS 265 Fundamentals of UNIX Administration	3
Programming Elective+	3
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**Designer Option**

WEB 133 Web Design Theory <u>or</u>	
ART 105 Fundamentals of Two-Dimensional Design	3
WEB 135 Web Design with Raster Images <u>or</u>	
ART 176 Digital Photo Imaging	3
WEB 138 Web Design with Vector Images <u>or</u>	
ART 108 Fundamentals of Computer Art	3
WEB 230 Web Design Animation <u>or</u>	
WEB 233 Web Multimedia Production	3
WEB 121 Electronic Commerce <u>or</u>	
MKTG 235 Internet Marketing <u>or</u>	
MKTG 201 Principles of Marketing	3
Design Elective (Any Web course)	3
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+ Select from: WEB 247, 255, 256; CIS 238, or CPS 121

**RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS**

Part time students can complete this program by taking one or more courses each semester.

**Developer Option**

Semester I		Semester II		Summer		Semester III		Semester IV	
WEB 110	3	ENGL 102/104/106	3	Core B Elective	3	Core A Elective	3	WEB 268	3
WEB 125	3	WEB 126	3	PE & W	1	SPCH 101 or 104	3	Computer Elective	3
WEB 130	3	WEB 240	3			WEB 253	3	Major Elective	3
WEB 143	3	Programming Elect.	3			WEB 260 or		Core C Elective	3
ENGL 101	3	AOS 202 or				CIS 223/264/265	3	Free Elective	3
		MGMT 227	3			CIS 245	3		

**Designer Option**

Semester I		Semester II		Summer		Semester III		Semester IV	
WEB 110	3	ENGL 102/104/106	3	Core B Elective	3	Core A Elective	3	WEB 268	3
WEB 125	3	WEB 133 or		PE & W	1	SPCH 101 or 104	3	Computer Elective	3
WEB 130	3	ART 105	3			WEB 230 or 233	3	Major Elective	3
WEB 143	3	WEB 135 or				Design Elective	3	Core C Elective	3
ENGL 101	3	ART 176	3			WEB 138 or		Free Elective	3
		WEB 121 or				ART 108	3		
		MKTG 235/201	3						
		AOS 202 or							
		MGMT 227	3						

Effective Fall 2008 all Associate Degree Programs must meet Diversity (D) and Physical Education and Wellness (W) requirements.