



**Computer Information Technology  
Credential:  
Web Development Certificate  
C25260WD**

This certificate program is designed to prepare graduates for entry-level employment with organizations that use the Internet internally and externally to communicate and disseminate information. The primary emphasis of this program is hands-on training using current technologies for Website development and maintenance. Upon completion, students should be able to apply Web Design principles to create effective Websites, create highly functional Web pages using HTML and CSS as primary markup tools, utilize Web development tools such as Adobe Dreamweaver or similar, create graphics, multimedia and animations and incorporate them into Web pages using industry standard graphic design tools, and apply basic skills in creating database-driven Web pages.

Graduates should qualify for employment in business, government, health-care, and education organizations that develop and maintain Websites. Job titles may include, but are not limited to, the following: Website Designer, Website Support Specialist, Website Tester, Webmaster, Web Graphics Designer, and Web Content Designer.

Program Length: 2 semesters  
Career Pathway Options: Associate in Computer Information Technology or Networking Technology  
Program Sites: Lee Campus – Day and Night Programs

**Course Requirements for Web Development Certificate**

| Course No. | Course Name               | C-L-SHC |
|------------|---------------------------|---------|
| *CIS 110   | Introduction to Computers | 2-2-3   |
| DBA 110    | Database Concepts         | 2-3-3   |
| DME 115    | Graphic Design Tools      | 2-2-3   |
| WEB 140    | Web Development Tools     | 2-2-3   |
| WEB 210    | Web Design                | 2-2-3   |
| WEB 250    | Database Driven Websites  | 2-2-3   |

Total Semester Hours Credit 17/18

\*Students may substitute CIS 111 (nontransferable).

Total Semester Hours Credit for Graduation : 17/18

**CIS 110 Introduction to Computers 2-2-3**

This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics (Quantitative Option). This course is also available through the Virtual Learning Community (VLC).*

**DBA 110 Database Concepts 2-3-3**

This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms.

**DME 115 Graphic Design Tools 2-2-3**

This course provides students with an introduction to creative expression and art/design techniques in a digital environment. Emphasis is placed on designing, creating, editing and integrating visual components consisting of bit-mapped and vector-based images, drawings, banners, text, simple animations, and multiple layers. Upon completion, students should be able to design and produce a range of visual products using digital processing techniques.

**WEB 140 Web Development Tools 2-2-3**

This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets.

**WEB 210 Web Design 2-2-3**

This course introduces intermediate to advanced web page design techniques. Topics include effective use of graphics, fonts, colors, navigation tools, advanced markup language elements, as well as a study of bad design techniques. Upon completion, students should be able to employ advanced design techniques to create high impact and highly functional web pages.

**WEB 250 Database Driven Websites 2-2-3**

This course introduces dynamic (database-driven) website development. Topics include the use of basic database CRUD statements (create, read, update and delete) incorporated into web applications, as well as in software architecture principles. Upon completion, students should be able to design and develop database driven web applications according to industry standards.