



Web Page, Digital/Multimedia and Information Resources Design CIP Code 11.0801

Introduction – Program of Study

Web developers design and create websites. When creating a website, developers have to make their client's vision a reality, by determining the manner in which the site should be used.

Web developers are responsible for the appearance of the site. They are also responsible for the site's technical aspects, such as performance and capacity, which are measures of a website's speed and the amount of traffic the site can handle. They also may create content for the site. Other tasks which a web developer may be asked to perform include designing, building or maintaining websites, using authoring or scripting languages, and using content creation tools, management tools, and digital media. Also, web developers are responsible for writing, designing and editing web page content, or directing others who produce content.

Web developers need to have a thorough understanding of HTML. Many employers also want developers to understand other languages, such as JavaScript, XML, SQL and database surveys, as well as knowledge of multimedia publishing tools. Throughout their career, web developers must keep up to date on new tools and computer languages. They must maintain an understanding of current web technologies and programming practices through continuing education, reading, or participation in professional conferences, workshops or groups. Some employers prefer web developers who have both a computer degree and classroom experience in graphic design, especially when hiring developers who will be heavily involved in the website's visual appearance.

Web architects or programmers are responsible for the overall technical construction of the website. They create the basic framework of the site and ensure that it works as expected. Web architects also establish procedures for allowing others to add new pages to the website and meet with management to discuss major changes to the site. Other tasks which a web architect or programmer may be asked to perform include meeting with their clients or management to discuss the needs of the website and the expected needs of the website's audience, creating and debugging applications for a website, and writing code for the site, using programming languages such as HTML or XML. They also analyze user needs to determine a website's technical requirements. Web architects or programmers may develop or validate test routines and schedules to ensure that test cases mimic external interfaces and address all browser and device types. Additionally, web architects or programmers confer with management or development teams to prioritize needs, resolve conflicts, develop content criteria, and choose solutions in webpage technical construction.

Web designers create the site's visual layout and integrate graphics and applications, such as a retail checkout tool into the site. Web designers may also be asked to design online surveys and collect the results in a database format. They work with graphics and other designers to determine the website's layout by integrating graphics, audio, and video into the website.

Webmasters maintain websites and keep them updated. They ensure that websites operate correctly and test for errors such as broken links. Many webmasters respond to user comments as well. Webmasters may monitor website traffic and perform or direct website updates.

Assumptions of this Program of Study

High-quality programs should meet the following standards:

1. Promote positive working relationships.
2. Implement a curriculum that fosters all areas of skill development
3. Use appropriate and effective teaching approaches.
4. Provide ongoing assessments of student progress.
5. Employ and support qualified teaching staff.
6. Establish and maintain relationships and use resources of the community.
7. Provide a safe and healthy learning environment.
8. Implement strong program organization and supervision policies that result in high quality teaching and learning.
9. Integrate academic skills and aptitudes necessary for postsecondary education, gainful employment and a foundation of lifelong learning.

CIP Code

11.0801 Web Page, Digital/Multimedia and Information Resources Design

This is an instructional program that prepares individuals to apply HTML, XML, JavaScript, graphics applications and other authoring tools to design, edit and publish (launch) documents, images, graphics, sound and multimedia products on the World Wide Web. This program includes instruction in internet theory, webpage standards and policies, elements of webpage design, user interfaces, vector tools, special effects, interactive and multimedia components, search engines, navigation, morphing, e-commerce tools and emerging web technologies.

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