

# Information Technology (WEBD)

## **WEBD121 Web Development Fundamentals (3 semester hours)**

This course introduces students to Web site development through a combination of readings and hands-on development exercises. This course covers Markup Language and Site Development Essentials, HTML5 Coding, Cascading Style Sheets (CSS) and Graphical Elements, Hyperlinks, HTML Tables, Web Forms, Video, Audio and Image Techniques, Web Site Development for Business, and Web Site Publishing and Maintenance. Fundamentals of JavaScript programming are also introduced in this course. Students will need access to Microsoft Internet Explorer and Firefox. This software is not provided by the course material grant and must be purchased/provided by the student. To succeed in this course, students will also need basic computer knowledge such as creating files and folders, downloading and uploading files, creating zipped files, and working with text editor such as Notepad++.

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD121>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

## **WEBD122 Introduction to Web Analytics (3 semester hours)**

This course is an introductory study of Web analytics technology and how businesses and organizations may use the technology to measure website traffic, enhance business presence, and conduct market research. The course begins with some basic introductory concepts and lays the foundation for more advanced topics regarding the subject. The course will cover both conceptual and scenario based exercises, thus enabling students to experience the maximum amount of comprehension and retention of material covered in the course.

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD122>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

## **WEBD220 Web 2.0 Fundamentals (3 semester hours)**

This course provides an introduction to Web 2.0 trends and technologies. Students will profile the various features, tools, communities, and practices available in Web 2.0. Also included is a survey of the concepts, tools, and practices used to build blogs and wikis. The course also reviews the various methods of posting information from the blog into web pages using RSS & Atom techniques. Students will also appraise other Web 2.0 technologies, such as forums, collaborative web sites, discussion boards, and wikis. Students will apply the knowledge gained in this course to design and create blogs and forums. Students must have access to a microphone. View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD220>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

## **WEBD221 Intermediate Web Development (3 semester hours)**

This course teaches advanced Web site development concepts and skills through a combination of readings and hands-on development exercises. This course covers the Advanced HTML5 and CSS3 Specialist curriculum of the CIW Web and Mobile Design Professional certificate. It builds upon fundamental Web coding skills by emphasizing HTML5 structure elements, embedded video and audio elements, HTML5 APIs, cross-browser user-input forms, use of JavaScript to add interactive capabilities to Web pages, and use of Cascading Style Sheets (CSS3) to enhance reusability and to design consistent interfaces. Advanced CSS3 techniques are introduced, including 2D and 3D transformations, transitions, animations, and user interface (UI) properties. Techniques for developing Web pages that are optimized for mobile devices are emphasized, including Responsive Web Design (RWD). Students will need access to Microsoft Internet Explorer and Firefox. This software is not provided by the course material grant and must be purchased/provided by the student. To succeed in this course, students will also need basic computer knowledge such as creating files and folders, downloading and uploading files, creating zipped files, and working with text editor such as Notepad++. (Prerequisite: WEBD121)

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD221>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

### **WEBD222 Advanced Web Analytics (3 semester hours)**

This course is an advanced study of Web analytics technology and how businesses and organizations may use the technology to measure website traffic, enhance business presence, and conduct market research. The course expands on concepts introduced from the Introduction to Web analytics course and expands into more advanced topics regarding the subject. The course will cover scenario-based exercises and requires students to use free Web analytic tools to experience the maximum amount of application and retention of material covered in the course. (Prerequisite: WEBD122)

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD222>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

### **WEBD241 Web Development Using JavaScript (3 semester hours)**

This course expands on the topics that were introduced in Web Development Fundamentals (WEBD121). This course introduces the student to fundamental JavaScript programming concepts such as variables and data, functions, controlling program flow (branching and iterating), the JavaScript object model (window, document, image, history, location, and navigator objects), and JavaScript language objects (String, Array, Date, and Math objects). This course also addresses the development of interactive forms with JavaScript, cookies and JavaScript security, controlling frames with JavaScript, and custom JavaScript objects. Students must have access to Internet Explorer 7 (or higher) or FireFox 39.0 (or higher) software. This course covers the CIW JavaScript Specialist curriculum of the CIW JavaScript Specialist certification. This software is not provided by the course material grant and must be purchased/provided by the student. (Prerequisite: WEBD121)

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD241>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

### **WEBD300 User Interface Design (3 semester hours)**

This course presents the principles and skills for how to design effective user interfaces for websites, with an emphasis on designing for mobile technologies. This course covers the content for the Certified Internet Web (CIW) User Interface Designer certification in the Web and Mobile Design Series. Emphasis is on how to apply key usability concepts and user analysis techniques; how to design for multiple platforms using suitable color schemes, formatting and topography; and how to collect information from customers, users, and market analysis to better address ease-of-use and to enhance website experiences for mobile users. (Prerequisite: WEBD121)

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD300>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

### **WEBD311 Internet Concepts (3 semester hours)**

This course concentrates on the technical side of the Internet, examining Internet communication and technology, Web browsing, multimedia on the Web, databases and Web search engines, business e-mail and personal information management, Internet services and tools [newsgroups, telnet, File Transfer Protocol (FTP), and instant messaging], Internet security (encryption, authentication, firewalls, malware, virus detection and prevention, spyware, updates and patches), and IT project and project management. Students will need access to a browser. This software is not provided by the course material grant and must be purchased/provided by the student. This course covers the Internet Business Foundations curriculum of the CIW Foundations certification.

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD311>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

### **WEBD321 Web eCommerce Development (3 semester hours)**

This course is a study of Web e-commerce development and how businesses and organizations may use the Web to the buy and sell products and services online. The course begins with some basic introductory concepts and progresses into more advanced topics regarding the subject. The course will cover both conceptual and scenario based exercises, thus enabling students to experience the maximum amount of comprehension and retention of material covered in the course.

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD321>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

### **WEBD322 Web Videography (3 semester hours)**

This course teaches the basic principles of Web videography and how to use software such as Adobe Photoshop Elements to edit photos and videos and create movies to market product and services online. The course begins with some basic introductory concepts and progresses into more advanced implementation of Web videography for promoting e-commerce and addressing other business requirements. The course will cover both conceptual and scenario based exercises, thus enabling students to experience the maximum amount of comprehension and retention of material covered in the course.

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD322>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

**WEBD323 Search Engine Optimization (3 semester hours)**

This course introduces concepts and strategies for successful search engine optimization (SEO). It examines different kinds of searches including image searches, local searches, and industry-specific vertical search engines. Additional topics such as link building, site structure improvements, conversation tracking, research and development keyword strategic development, and understanding barriers of search engine optimization are addressed for the purpose of increasing a website's relevance and to determine how people search for products and services.

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD323>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.

**WEBD341 Enterprise Data Exchange Using XML (3 semester hours)**

This course is a study of the concepts and applications of the Extensible Markup Language (XML), a general-purpose markup language that can be used to formally specify special-purpose markup languages. This course will be taught from a mixture of analytical and practical methods. Topics include: the history of XML, the XML language, Data Type Definition (DTD), XML Schema, eXtensible Style Sheet Language (XSL), and eXtensible Style Sheet Language Transformations (XSLT). The student will bind values to elements to render them distinct and different from its other instances of that attribute and explore the power of XML as a tool for Enterprise Exchange in both the J2EE and .NET Software Development Frameworks. Knowledge of XML will enable the student to standardize and reuse reference text, paragraphs, and chapters.

View the course schedule (<https://www.apus.edu/course-schedule/details.html?c=WEBD341>) to find out details about each course including prerequisites, course objectives, course materials, a snapshot of the syllabi, and session dates.