

Web Development Certificate Program Overview

The Web Development Certificate designed by Web professionals

Certificate requires a minimum of 270.5 course hours
plus Capstone

REQUIRED COURSES

250.5: 259.5 hours total

Web Foundations	8 hours
Designing Effective Websites	7.5 hours
XHTML: Level 1	8 hours
XHTML: Level 2	16 hours
Cascading Style Sheets: Level 1	15 hours
Cascading Style Sheets: Level 2	8 hours
Introduction to Programming using C#	27 hours
<i>or</i>	
Scripting/Programming Fundamentals	21 hours
Web Graphics with Photoshop	12 hours
JavaScript	24 hours
XML Introduction	8 hours
XSLT Transformations	12 hours
T-SQL Programming	33 hours
.NET Web Services: Windows Communication Framework	24 hours
Flash: Levels 1, 2 and 3	54 hours
<i>or</i>	
C# Programming: Level 1 and ASP.NET	57 hours
Web Development Certificate Capstone	TBA

ELECTIVES

20 hours total

AJAX	18 hours
C# Programming: Level 2	30 hours
C# Programming: Level 3	30 hours
Silverlight	7 hours
SQL Server 2008 Analysis Services (SSAS) and Business Intelligence	44 hours
Web Analytics	9 hours

FOR MORE INFORMATION:

- Get full course and schedule information at www.gotobcc.com/ce/webdevelopment
- Attend a free Web Development Certificate information session. Register by calling (425) 564-2263
- Questions about the program? Contact Computer Programs at (425) 564-4005

Register by phone at (425) 564-2263
or online at www.gotobcc.com



- Curriculum developed by respected Web developers, managers and programmers
- Hands-on courses taught by professionals currently working in the field
- Learn the skills in demand by employers today

Our flexible program is offered on your schedule: start any time you like and complete at your own pace, taking as few as one or two classes a week. Program can be completed in nine months or up to three years.

ATTEND A FREE INFORMATION SESSION

Meet with faculty for an overview of the program, how it fits with your career plans, and steps for getting started.

Find out more at www.gotobcc.com/ce/webdevelopment

CONTINUING EDUCATION

Web Development Certificate Program

Hands-on training designed
by Web professionals



www.gotobcc.com/ce/webdevelopment

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or online at www.gotobcc.com

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PS 10-09



WEB DEVELOPMENT COURSES

Web Foundations

Build your foundational skills by learning the terminology, tools, life cycle and content management planning tools to build or design a website. We also discuss security and e-commerce, maintenance vs. initial Web building and established industry standards. No prerequisite knowledge is required.

Designing Effective Websites

This course provides the principles needed to create a great website. Apply the basics of user interface design and usability to your Web pages; effectively plan and design a user-focused website; outline the site content, structure and navigation; design the look and feel of your site; plan a usability test; and find a domain name and hosting service. Come to class with an idea for a website you wish to create. Prerequisite: Basic knowledge of the Web and browsers.

XHTML: Level 1

Learn the basic building blocks of Web authoring and creating your own Web pages in this hands-on course. Topics covered include XHTML standards, basic structure and syntax, adding text and structuring pages, creating hyperlinks, and adding graphics and image maps. Prerequisite: Familiarity with the Web and Windows or Mac file and folder management.

XHTML: Level 2

Build on the tools learned in XHTML: Level 1 to develop more advanced Web pages. Learn how to create and modify tables, set up forms, use meta tags, validate code, and publish your site. The class includes a hands-on project that utilizes the tools learned in XHTML: Level 1 and 2. Prerequisite: XHTML: Level 1.

Cascading Style Sheets: Level 1

Design your website using the preferred method for formatting Web pages. Students learn correct style sheet syntax; how to effectively use external, embedded, and inline style sheets; and how different browser versions interpret style rules. Other skills include creating style rules to modify text and layout, and enhancing the look and feel of the page. Prerequisites: XHTML: Level 1 and 2.

Cascading Style Sheets: Level 2

Apply advanced CSS techniques to enhance your website. Learn how to understand the visual layout model, use creative background effects, make rounded-corner boxes, style hyperlinks, and create navigation bars and multi-column page layouts. Prerequisite: Cascading Style Sheets: Level 1.

Introduction to Programming using C#

This hands-on course is ideal for beginning programmers who want to learn programming in a Windows environment. Topics include: introduction to C#, controls, variables, constants, dialog boxes, menus, lists and loops. This class incorporates basic concepts of programming, problem solving, and programming logic and design techniques into an understandable format for beginning students. Prerequisite: Windows XP Introduction and file management skills are required along with Basic Programming Essentials class or equivalent.

Scripting/Programming Fundamentals

Intended for those with little or no programming experience, this course teaches the programming skills required to begin taking the specific software testing classes. Topics include variables, constants, if/then statements and looping structures, arrays, file operations, and an introduction to automation testing. Prerequisite: Familiarity with Windows.

Web Graphics with Photoshop

This intermediate Photoshop class focuses on creating and optimizing Web graphics and file formats. Create effective Web images geared to the file formats, file sizes, and color. Understand techniques used to mock-up a website. Learn Photoshop Web graphic tools using layers and slices, principles of effective design, as well as issues related to procuring and using existing clip art and photographs. Prerequisite: Photoshop: Level 1 and Designing Effective Websites.

JavaScript

JavaScript is the enabling technology behind Web 2.0 and AJAX. Study core language constructs, the document object model (DOM) and custom objects. Topics: function, date, array, strings, RegExp, math, document, node, element and attribute objects; HTML form manipulation; cookies; event binding/handling; prototype-based inheritance; DHTML; and multiple script debugging. Prerequisites: XHTML: Level 1 and 2 and Introduction to Programming using C#. Recommended: Cascading Style Sheets: Level 1.

XML Introduction

Extend your Web authoring expertise with eXtensible Markup Language. Learn how to set up and use an XML authoring environment, use Namespaces, validate XML documents, apply CSS and XSL stylesheets, manipulate trees using DOM, link using XLink, and transform XML to XML and XHTML. Prerequisites: XHTML: Level 1 and 2 and Cascading Style Sheets: Level 1.

XSLT Transformations

Explore two ways of gathering and formatting your XML for output: CSS and XSLT. Topics: using stylesheet processors to view the output of a transformation, utilizing conditional elements to control processing flow, and writing XPath functions/expressions to retrieve data from multiple documents. Prerequisites: XHTML: Level 1 and 2, Cascading Style Sheets: Level 1 and XML Introduction. Recommended: Introduction to Programming using C#.

T-SQL Programming

Learn advanced techniques using Microsoft's Transact-SQL (T-SQL). In this hands-on class, you will create advanced queries, views, stored procedures, functions, triggers and transactional statements. Students will also learn how to protect code execution and database objects with constraints and structured error handling. RDBMS design and scaling options will be learned by using schemas and partitioned tables. Students will design, implement SQL code, and create scripts of increasing complexity during the course. Prerequisites: Introduction to Programming using C# and T-SQL Query Extensions to SQL.

.NET Web Services: Windows Communication Framework

.NET Web Services enables the exchange of data in the form of XML messages between very different systems. Topics include UDDI, WSDL, SOAP, XSD, and XML; relation to Web services; database access; XML presentation; exception handling; accessing third party Web services; paying for Web services, authentication, and security. Prerequisites: XML Introduction and C# Programming: Level 1 and 2 or equivalent.

Flash: Level 1

Discover the basic concepts of Flash for design and development of media. Learn how to use drawing tools, import images, create vector graphics, work with layers, produce mask effects, add motion tweens, build interactive buttons, and create navigation systems. Course also includes introduction to ActionScripting. Prerequisites: Familiarity with design applications, such as Fireworks or Photoshop.

Flash: Level 2

Use your basic Flash skills to further your Flash expertise by adding topics such as using photos, sounds and video, the motion editor, mask animation, 3D tools, components and inverse kinematics. Continue to work with ActionScripting as you are introduced to version 3. Use the more advanced features of Flash such as animated buttons, interactivity and integrated media to enhance your work. Prerequisite: Flash: Level 1.

Flash: Level 3

This is an intermediate to advanced course using Adobe Flash CS4. Learn advanced Flash tools while programming with ActionScript 3. Topics: control and manipulate audio/video media, create and use XML files, create dynamic animations using tweens, design dynamic fields, develop pre-loaders, optimize your content, and load external content. Prerequisite: Flash: Level 2.

C# Programming: Level 1

Dive into the .NET world with this fundamentals class. Topics include conditional statements, objects, structures, arrays, classes, inheritance, exception handling, string formatting, file handling, and language fundamentals. Prerequisite: Introduction to Programming using C# or equivalent knowledge and experience.

ASP.NET

An introduction to ASP.NET using C#, with plenty of hands-on examples to illustrate how ASP.NET works. Students learn database access, error handling, managing session information, data binding, tables, list boxes, debugging, cookies, repeaters, and security. Prerequisites: XHTML: Level 1 and 2 and C# Programming: Level 1.

ELECTIVES

AJAX

Asynchronous JavaScript and XML (AJAX) is a proven Web development technique for creating interactive, responsive Web applications. Using a project-based approach, students learn to distribute a Web application's functionality between the Web server and the browser. Topics include components, frameworks, usability, performance, and security. Prerequisites: XHTML: Level 1 and 2, Cascading Style Sheets: Level 1 and JavaScript courses or extensive equivalent experience. Recommended: XML Introduction and Web server programming.

C# Programming: Level 2

Explore advanced technologies in the .NET framework. Learn about interfaces, delegates, events, operator overload, asynchronous programming, reflections and attributes. Class includes lab time for hands-on practice. Prerequisite: C# Programming: Level 1 or equivalent.

C# Programming: Level 3

Expand your study of .NET programming into more advanced concepts. Topics include assemblies, interoperability, remoting, .NET and Winforms. Class utilizes many interactive lab exercises to reinforce skills. Prerequisite: C# Programming: Level 2 or equivalent.

Silverlight

Using Silverlight, a Web-based digital video technology, designers are able to prepare media for encoding and distribution, and create W3C standards-compliant sites. Silverlight is a cross-browser, cross-platform plug-in for delivering media and rich interactive applications for the Web. In this overview the topics are: hosting in the browser, the tools and using Silverlight on the server. Prerequisite: Familiarity with .NET and building Web applications.

SQL Server 2008 Analysis Services (SSAS) and Business Intelligence

Gain hands-on experience and knowledge with the BI tools in SQL 2008. Topics include data warehousing and data mining techniques; design and creation of Star and Snowflake schema databases; developing multi-dimensional cubes; applications of analysis modeling; utilizing integration services, including ETL; and database reporting services. Prerequisite: Familiarity with SQL and relational database design. Recommended: SQL Server 2008 Introduction or equivalent.

Web Analytics

Use proven methods to evaluate the success of your website and identify its strengths and weaknesses. Apply relevant data to streamline your site to create a better user experience. Learn to measure KPIs (Key Performance Indicators) such as defining customer intent, completion rates, visitor trends, and page views. Prerequisites: Familiarity with basic concepts of Web Design and Statistics.

FOR COMPLETE COURSE AND
SCHEDULE INFORMATION GO TO:

www.gotobcc.com/ce/webdevelopment