

Web Development Certificate Program Overview

Certificate requires a total of 275.5 course hours

REQUIRED COURSES

260.5 hours total

Designing Effective Websites	7.5 hours
HTML: Level 1	10 hours
Cascading Style Sheets: Level 1	15 hours
HTML: Level 2	16 hours
C# Programming: 2	39 hours
JavaScript	30 hours
XML Introduction	8 hours
Structured Query Language: (SQL) Level 1	21 hours
ASP .NET: Level 1	27 hours
Algorithms in .NET	24 hours
C# Programming: 3	30 hours
PHP: Server Side Programming	21 hours
Web Development Certificate Capstone	12 hours

ELECTIVES

15 hours total

Cascading Style Sheets: Level 2	9 hours
C# Programming: 4	30 hours
Flash	18 hours
Java Programming	24 hours
jQuery Fundamentals	12 hours
Search Engine Optimization	9 hours
Web Analytics	9 hours
Web Services Using .NET	30 hours
WordPress	8 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 Professional Programs at (425) 564-4005

The Web Development Certificate

designed by Web professionals

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

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

Bellevue College does not discriminate on the basis of race or ethnicity; creed; color; national origin; sex; marital status; sexual orientation; age; religion; genetic information; the presence of any sensory, mental, or physical disability; gender identity or veteran status in educational programs and activities which it operates. Please visit www.bellevuecollege.edu/equal.asp.

REQUIRED COURSES

Algorithms in .NET

This class introduces algorithm techniques and data structures for new .NET developers with development experience but no formal computer sciences background who want to create tools using C#. The course is a good refresher on structured coding and includes hands-on exercises. Topics: strategies used for sorting, binary searching, stacks, queues, dynamically sized arrays, parsing numbers/strings, lists, and binary trees. Prerequisite: C# Programming: 2 or equivalent.

ASP.NET: Level 1

Get an introduction to ASP.NET with plenty of hands-on examples to illustrate how ASP.NET works. Topics: database access, error handling, managing session information, data binding, tables, list boxes, debugging, cookies, repeaters, and security. Prerequisites: HTML: Levels 1 and 2, and C# Programming: 2 or equivalent.

Cascading Style Sheets: Level 1

Enhance the look and feel of your website using cascading style sheets for formatting web pages. Study correct style sheet syntax and how to effectively use the different types of style sheets. Develop skills in using style rules to modify page text and layout through hands-on practice in the classroom. Prerequisites: HTML: Level 1 or equivalent.

C# Programming: 2

Study C# programming in a Console environment using Visual Studio. Apply the .NET Framework and object-oriented programming principles to create a C# application. In addition, develop skills in designing and writing C# computer programs using structures, collections and custom exceptions. Develop the skill to test code using unit testing techniques. Get hands-on practice with applying these programming concepts by creating new code and revising existing code. Prerequisite: C# Programming: 1 or equivalent knowledge and experience.

C# Programming: 3

Study C# programming in a Console environment using Visual Studio. Develop skills in designing and writing C# computer programs using object serialization, interfaces, delegates, events, asynchronous programming and threading. Get hands-on practice with applying these programming concepts by creating new code and revising existing code. Prerequisite: C# Programming: 2 or equivalent.

Designing Effective Websites

Effectively plan and design a user-focused website. This course covers the design principles needed to plan a great website, including defining the site purpose and audience; outlining the site structure and navigation; and designing the look and feel of your site. Come to class with an idea for a website you wish to create or redesign; leave class with a detailed plan for your site. Prerequisites: Familiarity with the Web, and Windows or Mac file and folder management.

HTML: Level 1

HTML gives you the building blocks to create your own web pages in this hands-on course. Use these blocks to create a basic web page with text, images and hyperlinks. You will be introduced to the current coding standards and how to make pages work in today's environment. Prerequisites: Familiarity with the Web, and Windows or Mac file and folder management.

HTML: Level 2

Build on the skills learned in the HTML: Level 1 and CSS: Level 1 classes to develop more advanced Web pages. You'll explore additional features for creating Web pages, including creating and modifying tables; setting up forms; adding multimedia; validating code and publishing your site. Prerequisites: HTML: Level 1 and Cascading Style Sheets: Level 1 or equivalent.

JavaScript

JavaScript is the key language behind Rich Internet Applications. The course covers core language constructs, the document object model (DOM) and custom objects, and introduces the principles of Ajax. Topics: function, date, array, strings, RegExp, math, document, node, objects; HTML form manipulation; cookies; event binding/handling; prototype-based inheritance; DHTML; multiple script debugging techniques; Ajax request and response handling. Prerequisites: HTML: Level 1 and C# Programming: 1. Recommended: Cascading Style Sheets: Level 1.

PHP: Server Side Programming

PHP is an open source server side scripting language that is widely used in web development. This course will cover how to gather user data from an html form, validate the data, as well as submit and gather data from a database. Additional topics include how to maintain website state during a session, and beyond a session, so that user data is not lost when navigating from page to page. Prerequisites: HTML: Level 1, Cascading Style Sheets: Level 1 and Basic Programming Essentials or equivalent.

Structured Query Language: (SQL) Level 1

Create queries using a standard structured query language (SQL) that is applicable to almost any relational database. Students will get hands-on practice creating queries to retrieve data in various forms, including filtered, calculated, grouped and aggregated, sorted, and consolidated from multiple data sources. Students will also get practice writing queries to manipulate data in a table and create, alter, and drop tables and views. Prerequisite: Familiarity with a relational database product.

Web Development Certificate Capstone

The final capstone project utilizes all the skills learned throughout the Web Development Certificate Program. This project will form a central part of your professional portfolio. Each of the sessions has a focus in the development of your site. The final session is your site presentation. Prerequisite: Successful completion of all required classes.

XML Introduction

Extend your Web authoring expertise with eXtensible Markup Language. Topics include how to set up and use an XML authoring environment, use Namespaces and entities, validate XML documents, apply CSS and XSL stylesheets, and transform data to XML and HTML. Prerequisites: HTML: Level 1 and 2 and Cascading Style Sheets: Level 1 or equivalent.

ELECTIVES

Cascading Style Sheets: Level 2

Apply advanced CSS techniques to enhance the appearance and usability of your website. Learn how to create vertical and horizontal navigation bars, multicolumn page layouts, position elements on the page and create style sheets for printing. Get hands-on practice with adding visual effects to web pages. Prerequisite: HTML: Level 2 or equivalent knowledge and experience.

C# Programming: 4

Study C# programming in a Console and Windows Presentation Foundation (WPF) environment using Visual Studio. Develop skills in designing and writing C# computer programs using attributes, reflection, a database connection, and LINQ. In addition, applying the scrum/agile practices to design and write C# computer programs. Get hands-on practice with applying these programming concepts by creating new code and revising existing code. Prerequisite: C# Programming: 3 and Data Access using C# or equivalent.

Flash

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.

Java Programming

This updated and extended course employs a combination of lecture, demonstration, and hands-on exercises to teach the fundamentals of the Java programming platform. It includes coverage of the Eclipse IDE. Topics: object-oriented programming principles, language constructs, class hierarchy, interfaces, packages, exceptions, I/O, User Interfaces, Event handling, JDBC, Servlets, and the Collections API. Prerequisite: Strong working knowledge of at least one other programming language.

jQuery Fundamentals

This is an introduction to the jQuery JavaScript framework and describes how to use it to add professional-quality code modules and UI widgets. jQuery pre-packages well-tested, complex JavaScript functionality so that it is relatively straightforward to employ without requiring advanced coding skills. Topics: building a custom slideshow, animated menus, custom plugins and advanced data tables. Prerequisite: Scripting for Web Designers or JavaScript or equivalent.

Search Engine Optimization

If you build it, will they come? Discover the steps you can take to increase your chances of being in the top of the search engine results. Create and apply effective keywords to site content, setup a proper site structure and understand the importance of linking. You will develop a strategy for improving your website to work better with the search engines. Prerequisites: Designing Effective Websites and Cascading Style Sheets: Level 1 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. Prerequisite: HTML: Level 1 or equivalent.

Web Services using .NET

.NET Web Services enables the exchange of data in the form of XML messages between very different systems. Topics: 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: 3 or equivalent.

WordPress

WordPress is a free and open source online application used by professional designers to create websites. Though it is commonly used to write and publish blogs, it is also used to design traditional looking websites. Topics: wordpress.com, wordpress.org, blogs, traditional sites, templates, themes, plugins, widgets, WordPress as a Content Management System (CMS). Open your WordPress.com account in advance. Prerequisite: HTML: Level 2 or equivalent.

FOR COMPLETE COURSE AND SCHEDULE INFORMATION GO TO:

www.gotobcc.com/ce/webdevelopment