



**Extended Studies & Workforce Education Division
Norwalk Community College
Computer Programming
Certificate Program**

Those who have mastery of computer programming are in demand in the business world. In this certificate program, individuals will learn how to use a variety of programming languages for business management needs.

<u>Required Courses</u>	<u>Total Hours</u>	<u>Total Sessions</u>	<u>Tuition*</u>	<u>Textbook</u>
1. Introduction to Programming with C#.net	18	6	\$349	Additional Fee
2. VisualBasic.NET Introduction to Programming	18	6	\$349	Additional Fee
3. Introduction to JavaScript Programming	18	6	\$349	N/A
4. JavaScript Applications	18	6	\$349	N/A

*Tuition subject to change.

Please refer to the Extended Studies & Workforce Education current catalog for course specifics (tuition, start date, class time slot and location).

Introduction to Programming with C#.net

This course provides an introduction to the world of programming utilizing Visual C#.NET, a high level event driven programming language. Students will develop skills for solving problems with a computer. The basic concepts of C# are mastered in order to aid in solving these problems. More advanced programming concepts are also explored including database programming and object oriented programming.

VisualBasic.NET Introduction to Programming

This course provides an introduction to the world of programming utilizing VisualBasic.NET, a high-level event driven programming language. Students will develop skills for solving problems with a computer. The basic concepts of VisualBasic will be mastered to aid in solving these problems. More advanced programming concepts will be explored, including database programming and object oriented programming.

Introduction to JavaScript Programming

JavaScript is a powerful programming language built into every web browser. In this course, students will examine the latest JavaScript language features, including: syntax and conventions, data types, operators, functions, closures, objects, timers and event handlers. The development environment will use “open source” tools including: Notepad++, jQuery, jsLint, and Firebug. Students will review best programming practices and focus on learning to avoid common pitfalls as well as developing strong thinking and debugging skills. This is a “hands-on” course. It is based on a series of increasingly challenging exercises in which students will learn to translate specifications and requirements into efficient and working code. Although there is no textbook for this course, readings from freely available web sources will be assigned.

Please Note: Students must bring a flash drive to class.

JavaScript Applications

JavaScript is a powerful programming language built into every popular web browser. Using a project-based approach, students will develop a small personal or business application using JavaScript and free software tools and frameworks (e.g., jQuery). Application areas include: designing and validating web-based forms, simple geocode mapping, searching public blog/book/news databases, creating browser based games. Students will learn about data structures, interface design, event handling, and multimedia programming, as well as how to organize work, break problems down into manageable chunks, read other peoples’ code, and debug and improve their own. Previous programming experience is not required but would be helpful.

Pre-requisite: Introduction to JavaScript or with permission of instructor. To receive pre-course information from the instructor, please provide your email address at time of registration.

Please Note: Students must bring a flash drive to class.

Dated Created: 7/31/15

Date Updated: 12/22/16