



SD-101: C# and Object-Oriented Programming

Description:

3 credits/126 hours

Prerequisite: None

This course provides the beginning programmer with a guide to developing programs in C#. C# is a language developed by the Microsoft Corporation as part of the .NET Framework and Visual Studio platform. The .NET Framework contains a wealth of libraries for developing applications for the Windows family of operating systems.

Textbook: Microsoft Visual C#: An Introduction to Object-Oriented Programming, 7th ed., Farrel– ISBN: 978-1-3710210-0

Course objectives:

Throughout the course, you will meet the following goals:

- Understand the language by creating working C# programs using both the simple command line and the Visual Studio environment
- Learn about data and how to input, store, and output data in C#
- Create GUI applications
- Explore classic programming structures—making decisions, looping, and manipulating arrays—and how to implement them in C#
- Provide a thorough study of methods, including passing parameters into and out of methods and overloading them
- Understand object-oriented concepts of inheritance and exception
- Learn how to save data to and retrieve data from files

Contents:

Chapter 1: A First Program Using C#

Chapter 2: Using Data

Chapter 3: Using GUI Objects and the Visual Studio IDE

Chapter 4: Making Decisions

Chapter 5: Looping

Chapter 6: Using Arrays

Chapter 7: Using Methods

Chapter 8: Advanced Method Concepts

Chapter 9: Using Classes and Objects

Chapter 10: Introduction to Inheritance

Chapter 11: Exception Handling

Chapter 12: Using Controls

Chapter 13: Handling Events

Chapter 14: Files and Streams

Grading Scale (70% required for passing)

Grade Weighting

A = 90-100%
B = 80-89.9%
C = 70-79.9%
F = Below 70%

Chapter Quizzes..... 50%
Activities 20%
Final Exam 30%
100%