



Software Development using Visual Basic in the .NET Framework

2023-2024
Catalog

[ARCHIVED CATALOG]

SDEV 210 - Software Development using Visual Basic in the .NET Framework

PREREQUISITES: [MATH 136 - College Algebra](#) AND ([SDEV 140 - Introduction to Software Development](#) OR [CSCI 101 - Computer Science I](#))

PROGRAM: Software Development

CREDIT HOURS MIN: 3

LECTURE HOURS MIN: 2

LAB HOURS MIN: 2

DATE OF LAST REVISION: Fall, 2015

Provides a basic understanding of the fundamental concepts involved when using a member of a Windows programming development language. The emphasis is on logical program design using a modular approach involving task oriented program functions. Visual Basic applications are built by selecting forms and controls, assigning properties, and writing code. Emphasis is also placed on data file design, data handling, database access, menus, and variable arrays. Students will use advanced features to increase their level of proficiency in developing Visual Basic applications.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Apply the Visual Studio Integrated development environment (IDE) functionality to create console, desktop, and web based (ASPX) software applications.
2. Explain the philosophy, structure, and foundations of the .NET framework.
3. Describe and create applications using factoring and object-oriented programming (OOP) concepts.
4. Implement projects that interact with Windows functionality.
5. Apply programming structures, data types, naming, and best practice concepts.
6. Apply methods and techniques to find (debug), prevent errors, and trap exceptions in projects.
7. Implement Visual Basic projects using various control objects in desktop and web based projects.
8. Implement collection objects including arrays in projects.
9. Apply programming objects that interact with files, file systems, and the network.
10. Create projects that interact with databases objects including the LINQ class.
11. Implement projects using graphics and multimedia.

COURSE CONTENT: Topical areas of study include -

- Form controls and Dialog boxes
- Object inheritance
- Object accessibility (assessors)
- Debugging techniques
- Namespaces
- Events and event handlers
- Breakpoints and watches
- HTML concepts
- Database and SQL basics
- ASP project concepts

- Class definition
- Stringbuilder class
- Graphical shapes and fonts



[Course Addendum - Syllabus \(Click to expand\)](#)
