CIT 195 - APPLICATION DEVELOPMENT

Course Description

The student is introduced to .NET Core application development. Students use the .NET framework and Visual Studio to develop applications for desktop and the web. Advanced topics and object-oriented concepts including inheritance, encapsulation, polymorphism, abstraction, data structures, collections, LINQ queries, Enums, delegates, events, unit testing and file I/O will be covered. Application design patterns including 3-tier architecture are emphasized. Group 2 course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Required Prerequisites

CIT 110 with a grade of 2.0 or higher.

General Education Outcomes supported by this course

Critical Thinking - Direct

Course Learning Outcomes

Knowledge:

- Explain the concept of inheritance.
- Explain the concept of design patterns.
- Explain the Repository Design pattern and the MVVM design pattern.

Application:

- Demonstrate the application of object-oriented programming techniques when solving design issues.
- Demonstrate the use of the MVVM pattern with 3-tier architecture.
- Use Visual Studio to create a variety of applications and push the applications to a GitHub repository.

Integration:

- Analyze a complex set of specifications and requirements to develop an application.
- Apply .NET knowledge to design and create a fully functioning web application.

Human Dimension:

- Demonstrate interpersonal communication skills while relating design decisions.
- Demonstrate the ability to effectively critique their peer's work.
- Construct a functional user interface (UI) and experience (UX).

Caring - Civic Learning:

- Identify how the quality of code affects our daily experience and interaction with technology.

Learning How to Learn:

- Select professional development resources that support their learning styles.
- Independently seek out solutions to problems.