CIT 135 - INTRODUCTION TO PROGRAMMING USING PYTHON

Course Description

This course is an introduction to programming using the Python language and intended for students without prior programming experience. Python is an interpreted language with a rich programming environment, and while easy for beginners to learn, is widely used in many areas including the web, data analysis and application development. Through online coding exercises and engaging projects students will explore good coding practices, simple design pattern, data types, control structures, decisions and conditionals, collections, methods, functions, classes and File I/O. Group 2 course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Recommended Prerequisites or Skills Competencies

Basic file management skills.

Course Learning Outcomes

Knowledge:
- Analyze and implement the appropriate data type for a given application.
- Analyze and implement the control structures necessary for a given algorithm.

Application:
- Demonstrate the process of developing an application.

Integration:
- Evaluate a set of application requirements to determine the required coding elements and application structure.

Human Dimension:
- Demonstrate interpersonal communication skills while relating design decisions.
- Develop a functional and consistent 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.