

CIT 112 - SCRIPTING AND AUTOMATION

Course Description

This course introduces students to scripting and programming to achieve realizable goals in a networked environment. Students will write scripts that will be reusable, scalable, and efficient for interfacing with systems using user input and system information. The course focuses primarily on using Python as a scripting language. Group 2 Course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Required Prerequisites

CIT 110, may be taken concurrently.

Course Learning Outcomes

Knowledge:

- Summarize appropriate data types for given applications.
- Summarize control mechanisms to perform algorithmic functions.
- Summarize programming standards used in business-level applications.
- Summarize effective scripting techniques.
- Identify areas where automation can be implemented.

Application:

- Demonstrate the programming process to develop applications.
- Implement programming methodology to create scripts on computer systems.
- Implement automation tasks to perform routine tasks on systems.

Integration:

- Evaluate criteria for an application to determine required scripting elements.
- Evaluate criteria to determine need for automation.

Human Dimension:

- Collaborate with others to achieve desired outcomes.

Caring - Civic Learning:

- Identify quality of code as it affects user experience and usability.
- Evaluate the ethical dilemmas that may arise from automation and scripting.

Learning How to Learn:

- Acknowledge that technology is constantly evolving requiring new skillsets.
- Apply knowledge of scripting and automation into further Information Technology courses.