# IT 5413 SOFTWARE DESIGN AND DEVELOPMENT

# **Module 1: Introduction**

## Overview and learning outcomes

In this module, we will be covering the basic introduction to what a computer system is and the basics of computer programming. We will also learn some of the basic PYTHON commands, and how to "read" user input, as well as produce output.

COURSE OBJECTIVES

This module contributes to the following course objectives:

1. Analyze, design, develop, and implement programs in an object-oriented language

MODULE OBJECTIVES

Upon the completion of this module, you will be able to:

1. Discuss components of a computer system - hardware and software
2. Describe the Program Development Life Cycle
3. Use the "print" function in a program
4. Write a program to read input from the keyboard, and produce output

## ASSIGNED READINGS

1. Introduction To Computer Systems
2. How Do Computers work? Link: <https://www.youtube.com/watch?v=DKGZlaPlVLY>
3. What are Compiler & Interpreter? Link: <https://www.guru99.com/difference-compiler-vs-interpreter.html>
4. Program Development Life Cycle Link: <https://sceweb.sce.uhcl.edu/helm/SWEN5432-SDLC/myfiles/References/SDLC-Rajkumar.pdf>
5. What Is Python? Link: <https://www.w3schools.com/python/python_intro.asp>
6. What is Python? Link: <https://www.youtube.com/watch?v=Y8Tko2YC5hA&list=PLTjRvDozrdlxj5wgH4qkvwSOdHLOCx10f&index=4>

Link: <https://www.youtube.com/watch?v=kqtD5dpn9C8&t=505s>

1. Python Installation ((Located In D2l In The Module)
2. Python Introduction (Located In D2l In The Module)

## RECOMMENDED READINGS

1. Introducing Python: Chapter 1 (Link: <https://www.brianheinold.net/python/A_Practical_Introduction_to_Python_Programming_Heinold.pdf>)

## ACTIVITIES AND ASSESSMENTS

1. Module 1 Discussion
2. Assignemnt 1 (Located In D2l In The Module)