# IT 5413 SOFTWARE DESIGN AND DEVELOPMENT

# **Module 6: Object-Oriented Programming**

## Overview and learning outcomes

In this module, we will be covering the differences in procedural and object-oriented programming language. We will look at classes and instances in Object-Oriented Programming.

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:

## Compare and contrast procedural and object-oriented programming

## Describe a class and instance

## Write a program using the object-oriented programming method

## ASSIGNED READINGS

1. Object-Oriented Programming (Located In D2l In The Module)
2. Classes and Inheritance (Located In D2l In The Module)
3. Python OOP (Located In D2l In The Module)
4. Python Classes and Objects. Link: <https://www.w3schools.com/python/python_classes.asp>
5. Python Inheritance. Link: <https://www.w3schools.com/python/python_inheritance.asp>
6. Python OOP. Link: <https://www.youtube.com/watch?v=pTB0EiLXUC8&t=4s>
7. Python Data Structures. Link: <https://docs.python.org/3/tutorial/classes.html>

## RECOMMENDED READINGS

1. Introducing Python: Chapter 14 (Link: <https://www.brianheinold.net/python/A_Practical_Introduction_to_Python_Programming_Heinold.pdf>)

## ACTIVITIES AND ASSESSMENTS

1. Module 6 Discussion
2. Assignment 6 (Located In D2l In The Module)