ICT162 Object Oriented Programming

Level: 1

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY REGULAR SEMESTER

Synopsis:

This course covers further concepts in object-oriented programming. It explains the basic building blocks of an object. Students learn how to apply object structure and methods to store and compute tabular information as a system of objects. The principles and reasons of structuring objects in a class hierarchy and an association will be explained. A particular class, the container class, is introduced. Students will learn how complex processing mechanisms can be programmed through the container class. These complex mechanisms are then shown to be the building blocks for Graphical User Interface and Event Management, which have become a standard approach to building native software applications.

Topics:

- How to store tabular information in objects
- How to process tabular information through objects
- Class
- Object
- Method
- Abstract Class
- Inheritance
- Composition
- Introduction to SOLID principles
- Container data structure and event management
- Graphical User Interface (GUI) application
- Process exception handling

Learning Outcome:

- Describe the structure of objects: attributes and methods
- Use objects to store and compute tabular information
- Demonstrate how class hierarchy and association can be used to organize information
- Apply the principles of object-oriented programming principles in designing and developing applications
- Construct the class hierarchy and association according to specification
- Develop Graphical User Interface (GUI) for an application based on user requirements

Assessment Strategies - Regular Semester (Daytime Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	1

Overall Continuous Assessment	PRE-CLASS QUIZ 2	1
	PRE-CLASS QUIZ 3	1
	QUIZ 1	3
	TUTOR-MARKED ASSIGNMENT 1	24
Overall Examinable Components	Written Exam	70
Total		**100**

*The information listed is subject to review and change.