Module Title: Component-based System Programming
Module Code: CIM2565

Duration: 15 weeks
Class-Contact Hours: Lecture 15 hours
Tutorial/Laboratory 30 hours

Assessment Scheme: Continuous Assessment 100%
- Assignment 30% (2-3 Assignments)
- Lab 15% (<= 5 Labs)
- Tutorial 15% (<= 5 Tutorials)
- Test 40% (2-3 Tests)

Module Rationale/Aims:
- to introduce more concepts and techniques of component-based programming
- to introduce the concepts of event-driven GUI programming

Learning Objectives:
Students will be able to:
- appreciate the benefits of component and object-oriented technologies;
- write object-oriented programs with simple GUI components;

Recommended References:

Key Content Area:

Section 1 Object-Oriented Programming
- Abstraction and Encapsulation
- Inheritance and Polymorphism
- Interface and Abstract Class
- Design and Implementation of Classes
- Relations between Classes
- Message-passing and Methods
- Access Control and Visibility

Section 2 GUI Programming
- Basic GUI components
- Components, Containers, and Layouts
- Event-Driven Programming
- Library Classes for Event Handlers