

## COURSE OUTLINE

# Object-Oriented Modelling & UML

In this module learners will understand the concepts and principles of Object Oriented Modelling Techniques. They will demonstrate an understanding of structural and operational elements with modelling and the approaches involved. Learners will design a game element using Object Oriented Modelling techniques.

**Chapter 1 Overview**

- Welcome
- What is Object-Oriented Modelling?
- What is UML?
- Introduction to Object-Oriented Programming
- Introduction to Poseidon
- Introduction to Pseudo Code
- How to use these Learning Resources

**Chapter 2 Structural Elements**

- Introduction
- Objects
- Classes
- Instances
- Instance and Class Properties
- Mini Assignment

**Chapter 3 Behaviour**

- Introduction
- Operations
- Messaging
- Mini Assignment

**Chapter 4 Inheritance**

- Introduction
- Inheritance of Instances and Classes
- Inheritance of Behaviour
- Multiple Inheritance
- Mini Assignment

**Chapter 5 Advanced Concepts of OO**

- Introduction
- More Relationships
- Associations
- Aggregation and Composition
- Mini Assignment
- Packages

**Chapter 6 Best Practice**

- Introduction
- Non Model Elements
- Comments
- Naming Conventions
- Mini Assignment