Access to Higher Education Unit

This unit forms part of an Access to HE Diploma. If delivering the graded version of this unit, please refer to the Provider Handbook for details on grading descriptors and the application of these across units within your programme.

Unit Title: Programming Using Objects

Graded Unit Reference Number: GA33COM03

Ungraded Unit Reference Number: UA33COM03

Module: Computing

Level: 3

Credit Value: 3

Minimum Guided Learning Hours: 30

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand the nature of objects and the principles of object inheritance and hierarchy	1.1 Identify a range of objects in a simple object oriented application, and explain why object-oriented approach is particularly useful for applications using a graphic user interface
	1.2 Define the term 'class object' and use examples to explain how instances of these are used to build applications
	1.3 Describe the principle of inheritance and use diagrams to illustrate how the inheritance of properties is hierarchical
2. Understand the differences between object properties and methods and modify default properties	2.1 Distinguish between the properties and the methods associated with objects
	2.2 Create programmed solutions selecting and using forms, message boxes, text boxes, command buttons, list boxes, combo boxes, as appropriate
	2.3 Modify default properties of objects to suit defined needs, e.g. name, size, colour, default text etc

3.	Be able to solve problems using Object Oriented Programming	3.1	Design solutions to straight forward problems using Object Oriented Programming
		3.2	Use program statements to change some of the properties of objects depending on user input as appropriate
		3.3	Systematically name objects to make program statements clearer
		3.4	Use debugging tools to set breakpoints, interrogate variables and step-though programs to detect code errors and modify programs