Changing lives through learning

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: Complex Numbers

Graded Unit Reference Number: GA33MTH01

Ungraded Unit Reference Number: UA33MTH01

Module: Mathematics

Level: Three (3)

Credit Value: Three (3)

Minimum Guided Learning Hours: 30

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand and manipulate complex numbers	1.1 Explain the nature of complex numbers in terms of their real and imaginary parts
	1.2 Add, subtract, multiply and divide using complex numbers
	1.3 Solve quadratic equations with complex roots
2. Understand the graphical representation of complex numbers	2.1 Represent complex numbers using Argand diagrams
	2.2 Express complex numbers using Polar and Cartesian coordinates
	2.3 Find the modulus, argument and conjugate of a complex number and explain their geometric significance
	2.4 Solve simple problems using [r, θ]
	2.5 Use de Moivre's theorem to expand trigonometric functions e.g. cos3x
	2.6 Use de Moivre's theorem to find the roots of complex numbers