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: Vectors

Graded Unit Reference Number: GA33MTH12

Ungraded Unit Reference Number: UA33MTH12

Module: Mathematics

Level: Three (3)

Credit Value: Three (3)

Minimum Guided Learning Hours: 30

Units barred for selection against this unit:

- Coordinate Geometry and Vectors (GA33MTH24 / UA33MTH24)

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand the nature of vectors	1.1 Define the terms scalar and vector and give examples of each type
	1.2 Represent line segments as vectors and use appropriate notation
	1.3 Define position and free vectors
2. Know how to manipulate vectors	2.1 Use Cartesian notation
	2.2 Add and subtract, multiply by scalars and interpret the results
	2.3 Calculate unit vectors
3. Apply vectors to the geometry of a straight line	3.1 Formulate the equation of a line in vector notation
	3.2 Determine whether three points are collinear
4. Use scalar products to solve problems	Use scalar products to: 4.1 calculate the equation of perpendicular lines from appropriate information

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	4.2	find the angle between two lines at the point of intersection and
	4.3	resolve vectors in a given direction
5. Apply vectors to problems involving displacement, velocities and forces	5.1	Use vectors to solve problems involving displacement, velocities and forces

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