

## 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:** Probability and Sets

**Graded Unit Reference Number:** GA33MTH32

**Ungraded Unit Reference Number:** UA33MTH22

**Module:** Mathematics

**Level:** 3

**Credit Value:** 3

**Minimum Guided Learning Hours:** 30

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand conditional probability	1.1 Solve probability problems involving non-independent events and non-mutually exclusive events
	1.2 Use two-way tables to solve conditional probability problems
2. Understand uniform distributions	2.1 Solve problems involving discrete uniform distributions, their means, and variances
3. Understand basic concepts of set theory	3.1 Use appropriate set notation, including symbols for: subset, element of, intersect, union and complement
	3.2 Convert between basic examples of roster notation and set builder notation
	3.3 Explain key terms relating to sets, including: element, subset, finite/infinite, cardinality, empty set and power set
	3.4 Solve problems involving operations on sets
4. Understand how Venn diagrams can be used to express sets	4.1 Construct and interpret Venn diagrams to solve problems involving frequencies and probabilities

4.2 Construct and interpret Venn diagrams to solve problems involving relationships between sets and subsets