Open Awards Qualification Unit

This unit forms part of a regulated qualification. Click **here** to view qualifications.

1 Unit Details

Unit Title:	Mathematics for Seafarers
Unit Reference Number:	T/618/3801
Level:	3
Credit Value:	5
Minimum GLH:	40

2 Learning Outcomes and Criteria

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):	
1. Be able to calculate simple statistical measures in scientific contexts	1.1	Calculate the mean or mode or median for given data
	1.2	Calculate the range and standard deviation for given data
2. Be able to interpret simple statistical measures in scientific contexts	2.1	Interpret the results for mean or mode or median in relation to given data
	2.2	Interpret he results for range and standard deviation in relation to given data
3. Be able to simplify algebraic expressions involving brackets, fractions and indices in scientific contexts	3.1	Simplify algebraic expressions involving brackets
	3.2	Simplify algebraic expressions involving fractions.
	3.3	Simplify algebraic expressions involving indices: positive or negative or fractional
4. Be able to use straight line graphs in scientific contexts	4.1	Given a straight line graph, state its equation
	4.2	Given a straight line equation, sketch its graph

		4.3	Plot suitable given data to obtain a graph with line of best fit
		4.4	Given a graph with line of best fit, use it to obtain a predicted value for one variable given a value for the other variable
5.	Be able to Evaluate simple scientific formulae	5.1	Evaluate scientific formulae involving addition or subtraction or multiplication or division of terms, and combinations of these operations
		5.2	Evaluate scientific formulae involving simple powers: squares or square roots or cubes or cube roots
6.	Be able to transpose simple scientific formulae	6.1	Transpose scientific formulae involving addition or subtraction or multiplication or division of terms, and combinations of these operations
		6.2	Transpose scientific formulae involving simple powers: squares or square roots or cubes or cube roots
7.	Be able to calculate trigonometric problems	7.1	Express acute angles in degrees and radians and
		7.2	State the relationship between the two expressions
		7.3	Define acute, obtuse, complementary and supplementary angles
		7.4	Solve calculations which express the relationship between these expressions
		7.5	Define sine, cosine and tangent
		7.6	Solve calculations which express the relationships between these expressions
		7.7	Solve problems using Pythagoras Theorem

**Barring: If this unit is being delivered within the
Level 3 Certificate in Maritime Studies qualification it cannot be combined with:**

F/616/9142 Maths and Stability at Sea