

Unit Title:	Trigonometry
Unit Level:	Three
Unit Credit Value:	3
Unit Code:	WNI488
Unit Type:	Academic Subject Content
Unit Review Date:	31/12/2028
Graded / Ungraded:	Graded

This unit has 5 learning outcomes:

Learning outcomes	Assessment criteria
The learner will:	The learner can:
1. Know how to solve triangles.	1.1 Use the Cosine Rule to solve problems. 1.2 Use the Sine Rule to solve problems. 1.3 Use formula area = $\frac{1}{2} ab \sin C$
2. Know about radian measure.	2.1 Convert between degrees and radians and recognise common multiples of πc 2.2 Use the formulae for arc length and area of a sector defined in radians.
3. Know about the graphs of trigonometric functions.	3.1 Recognise and sketch the graphs of $\sin x$, $\cos x$, $\tan x$ using both degrees and radians. 3.2 Describe the properties of transformed graphs of trigonometric functions i.e. different combinations of a, b, c, d in $y = a + b \sin (c \theta + d)$
4. Know how to use trigonometric identities.	4.1 Use the identity $\sin^2 x + \cos^2 x = 1$ to simplify trigonometric expressions. 4.2 Use the identity $\tan x = \frac{\sin x}{\cos x}$ to simplify trigonometric expressions.
5. Be able to solve equations.	5.1 Solve equations of the type $\sin(ax + b) = c$ (with either a or b = 0) in a given interval of degrees or radians.

Assessment (Graded)

1. Meets assessment criteria	At least a Pass
2. Further grading	
▪ Meets assessment criteria but not merit grading standards	Pass
▪ Meets assessment criteria and merit but not distinction grading standards	Merit
▪ Meets assessment criteria and distinction grading standards	Distinction