



## Civil Engineering, Mechanical Engineering and Supply Engineering

Please tick off if you have any knowledge to the following topics:

Topic	Description	Included in your programme	Not included in your programme
Functions including one variable	Domain and range		
	Inverse functions		
	Linear functions		
	Polynomials		
	Rational functions		
	Trigonometric functions (sine, cosine and tangent)		
Differentiation	Exponential and logarithm functions (including the laws of these)		
	The concept of limit		
	Tangents and normals		
Integration	Rules of operations for differentiation (product, quotient, chain rule)		
	Indefinite integral		
	The definite integral		
	Rules for the integral		
	Integration by substitution		
	Integration by parts		
	Calculation of areas by integration		
Vectors in two dimensions	Calculation of volumes of revolution by integration		
	Rules of operations for vectors in two dimensions		
	Scalar product		
Differential equations	Vectors in coordinate geometry		
	General/particular solution		
	Separable equations of first order		