

Mathematics/Pangarau Matrix

Level 1	Level 2	Calculus	Level 3	Statistics and Modelling
AS90147 1.1 Use straightforward algebraic methods and solve equations 4 credits External	AS90284 2.1 Manipulate algebraic expressions and solve equations 4 credits External	AS90635 C3.1 Differentiate functions and use derivatives to solve problems 6 credits External	AS90641 S3.1 Determine the trend for time series data 3 credits Internal	
AS90148 1.2 Sketch and interpret graphs 3 credits External	AS90285 2.2 Draw straightforward non-linear graphs 3 credits External	AS90636 C3.2 Integrate functions and use integrals to solve problems 6 credits External	AS90642 S3.2 Calculate confidence intervals for population parameters 3 credits External	
AS90149 1.3 Solve problems involving measurement of everyday objects 3 credits Internal	AS90286 2.3 Find and use straightforward derivatives and integrals 4 credits External	AS90637 C3.3 Solve problems and equations involving trigonometric functions 4 credits Internal	AS90643 S3.3 Solve straightforward problems involving probability 4 credits External	
AS90150 1.4 Use geometric techniques to produce a pattern or object 2 credits Internal	AS90287 2.4 Use coordinate geometry methods 2 credits External	AS90638 C3.4 Manipulate real and complex numbers, and solve equations 5 credits External	AS90644 S3.4 Solve equations 4 credits External	
AS90193 1.5 Use statistical methods and information. 3 credits Internal	AS90288 2.5 Select a sample and use this to make an inference about the population 3 credits Internal	AS90639 C3.5 Sketch graphs of conic sections and write equations related to conic sections 3 credits External	AS90645 S3.5 Select and analyse continuous bi-variate data 3 credits Internal	
AS90194 1.6 Determine probabilities 2 credits External	AS90289 2.6 Simulate probability situations and apply the normal distribution 2 credits Internal		AS90646 S3.6 Use probability distribution models to solve straightforward problems 4 credits External	
AS90151 1.7 Solve straightforward number problems in context 3 credits External	AS90290 2.7 Solve straightforward problems involving algebraic and geometric sequences 2 credits External		AS90647 S3.7 Use mathematical model involving curve fitting to solve a problem 3 credits Internal	
AS90152 1.8 Solve right-angled triangle problems 2 credits External	AS90291 2.8 Solve trigonometry problems requiring modelling of practical situations 2 credits Internal			
AS90153 1.9 Use geometric reasoning to solve problems 2 credits External	AS90292 2.9 Solve straightforward trigonometric equations 2 credits External			

AS90799	CAS Mathematics 1.1	<i>NOTE: AS90799 and AS90800 are standards parallel to AS90147 and 90148 respectively, for which approved CAS calculators are allowed. CAS devices are not allowed for AS90147 and AS90148. AS90799 is mutually exclusive with AS90147. AS90800 is mutually exclusive with AS90148</i>
Demonstrate an understanding of straightforward algebraic strategies	External	
4 credits		
AS90800	CAS Mathematics 1.2	
Demonstrate an understanding of the features of graphs	External	
2 credits		