

Mathematics

Course: Mathematics 101 (MAT 101)				Teacher to see: Ms Catchpole or Mr Louie				
<p>COURSE DESCRIPTION: A course covering all aspects of Mathematics and Statistics. Students will be expected to work at a Merit and Excellence level. Successful completion of the course may lead to the 201 Calculus or Statistics courses.</p> <p>ELIGIBLE FOR COURSE ENDORSEMENT: YES</p>				<p>PREREQUISITES: Level 5+ in the Yr10 Algebra and Graphing tests, plus Achieved in 1.1 Number and 1.5 Measurement standards</p>				
				<p>COSTS: Nil</p>				
Standard	Level	Domain	Title	Int / Ext	Cr	Level 1 Lit / Num	U.E. Literacy	Vocational Pathway
AS91031	1	Maths/Stats	Geometric reasoning	Ext	4	Num		
AS91036	1	Maths/Stats	Investigate a bivariate dataset	Int	4	Num/Lit		
AS91032	1	Maths/Stats	Right angled triangles	Int	3	Num		
AS91028	1	Maths/Stats	Tables, Graphs and Equations	Ext	4	Num		
AS91037	1	Maths/Stats	Demonstrate an understanding of chance and data	Ext	4	Num/Lit		
Total Credits:					15			
<p>Related careers: An important basis for study in many subjects and future careers options</p> <p>Transferable skills: Maths skills are applicable to many future pathways</p>								

Course: Mathematics 102 (MAT 102)

Teacher to see: Ms Catchpole or Mr Louie

COURSE DESCRIPTION: A course covering some aspects of Mathematics and Statistics, with a high practical component. Successful completion of the course may lead to the 202 Mathematics courses.

PREREQUISITES: Students should have successfully completed Year 10 Maths.

ELIGIBLE FOR COURSE ENDORSEMENT NO

COSTS: Nil

Standard	Level	Domain	Title	Int / Ext	Cr	Level 1 Lit	U.E. Literacy	Vocational Pathway
AS91026	1	Maths/Stats	Apply Numeric Reasoning to Solve Problems	Int	4			
US24709	1	Core Skills	Produce a balanced budget	Int	3			
AS91036	1	Maths/ Stats	Investigate bivariate numerical data	Int	3	Lit		
AS91030	1	Maths/ Stats	Apply measurement in solving problems	Int	3			
AS91038	1	Maths/ Stats	Investigate a situation involving elements of chance	Int	3	Lit		
Total Credits:					16			

Related careers: An important basis for study in many subjects and future careers options

Transferable skills: Maths skills are applicable to many future pathways

Course: Mathematics 202 (MAT 202)

Teacher to see: Ms Catchpole

COURSE DESCRIPTION: A combination of maths and statistics standards are taught within this course. Students can progress towards 301 mathematics.

PREREQUISITES:
10-14 Level 1 Maths credits from Level 1 Mathematics.

ELIGIBLE FOR COURSE ENDORSEMENT: NO

COSTS: Nil

Standard	Level	Domain	Title	Int / Ext	Cr	Level 1 Lit	U.E. Literacy	Vocational Pathway
AS91260	2	Maths/Stats	Use networks in solving problems	Int	2			CI, PI, SC
AS91259	2	Maths/Stats	Apply trigonometric relationships	Int	3			PI, SC,CI
AS91268	2	Maths/Stats	Situations involving elements of chance	Int	2	Lit		PI, SC,CI
AS91258	2	Maths/Stats	Apply sequences and series in solving problems	Int	2			CI, MT, PI
AS91269	2	Maths/Stats	Apply systems of equations in solving problems	Int	2			CI
AS91264	2	Maths/Stats	Use statistical methods to make an inference	Int	4	Lit		PI, SI, SC,CI
Total Credits:					15			

Related careers: An important basis for study in many subjects and future careers options

Transferable skills: Maths skills are applicable to many future pathways

Course: Mathematics 301 (MAT 301)

Teacher to see: Ms West, Ms Catchpole or Ms Maxlow

COURSE DESCRIPTION: Students will study a mixture of Level 3 Mathematics and Statistics Standards to a Merit and Excellence level to give a broad range of ideas.

PREREQUISITES: 14 or more Level 2 Maths credits.

ELIGIBLE FOR COURSE ENDORSEMENT NO
UNIVERSITY APPROVED LIST SUBJECT YES

COSTS: Nil

Standard	Level	Domain	Title	Int / Ext	Cr	Level 1 Lit / Num	U.E. Literacy	Vocational Pathway
AS91580	3	Maths/Stats	Investigate time series data	Int	4			
AS91581	3	Maths/Stats	Investigate bivariate measurement data	Int	4			
AS91576	3	Maths/Stats	Use critical path analysis in solving problems	Int	2			
AS91574	3	Maths/Stats	Apply linear programming methods	Int	3			
AS91587	3	Maths/Stats	Apply systems of simultaneous equations	Int	3			
Total Credits:					18			

Related careers: An important basis for study in many subjects and future careers options

Transferable skills: Maths skills are applicable to many future pathways

Course: Mathematics with Calculus 201 (MAC 201)

Teacher to see: Ms Catchpole or Mr Louie

COURSE DESCRIPTION: Mathematics with Calculus has a high algebra focus. It will enable a student to work towards taking Calculus at Level 3.

PREREQUISITES: 14 Level 1 Math credits including Merit + 1.3 and 1.6

ELIGIBLE FOR COURSE ENDORSEMENT YES

COSTS: Graphics Calculator

Standard	Level	Domain	Title	Int / Ext	Cr	Level 1 Lit/Num	U.E. Literacy	Vocational Pathway
AS91256	2	Maths/Stats	Apply co-ordinate geometry methods in solving problems	Int	2			CI, MT
AS91261	2	Maths/Stats	Apply algebraic methods in solving problems	Ext	4			CI, MT, PI, S,
AS91257	2	Maths/Stats	Apply graphical methods in solving problems	Int	4			CI, MT, PI, S,
AS91262	2	Maths/Stats	Apply calculus methods in solving problems	Ext	5			CI, MT, PI, S,
AS91259	2	Maths/Stats	Apply trigonometric relationships	Int	3			PI, S, SC, CI
Total Credits:					18			

Related careers: An important basis for study in many subjects and future careers options

Transferable skills: Maths skills are applicable to many future pathways

Course: Mathematics with Calculus 301 (MAC 301)

Teacher to see: Mr Anderson or Mr Louie

COURSE DESCRIPTION: A strong academic course covering further calculus techniques, complex numbers and applications of trigonometry. Candidates will need strong algebra skills for this course.

PREREQUISITES: 14 Level 2 Maths credits, Merit in Level 2 Algebra and Calculus externals.

ELIGIBLE FOR COURSE ENDORSEMENT YES
UNIVERSITY APPROVED LIST SUBJECT YES

COSTS: Subject fees: None.
Other costs: Graphics calculator, additional exam papers and revision guides can be purchased

Standard	Level	Domain	Title	Int / Ext	Cr	Level 1 Lit / Num	U.E. Literacy	Vocational Pathway
AS 91587	3	Maths/Stats	Simultaneous equations	Int	3	Num		
AS 91575	3	Maths/Stats	Trigonometric methods	Int	4	Num		
AS91577	3	Maths/Stats	The Algebra of complex numbers	Ext	5	Num		
AS91578	3	Maths/Stats	Differentiation methods	Ext	6	Num		
AS91579	3	Maths/Stats	Apply Integration methods in solving problems	Ext	6	Num		
Total Credits					24			

Related careers: An important basis for study in many subjects and future careers options

Transferable skills: Maths skills are applicable to many future pathways.

Course: Mathematics with Statistics 101 (MAS 101)				Teacher to see: Ms Catchpole				
<p>COURSE DESCRIPTION: A course covering some aspects of mathematics and statistics. This course is targeted for students aiming to achieve at merit and excellence level. Successful completion of the course may lead to the 201 Statistics maths course.</p> <p>ELIGIBLE FOR COURSE ENDORSEMENT YES</p>				<p>PREREQUISITES: Students should be working towards curriculum Level 6 and have successfully achieved the Measurement standard sat in Year 10 Maths.</p>				
				<p>COSTS: Nil</p>				
Standard	Level	Domain	Title	Int / Ext	Cr	Level 1 Lit	U.E. Literacy	Vocational Pathway
AS91029	1	Maths/Stats	Apply linear algebra in solving problems	Int	3	Num		
AS91036	1	Maths/Stats	Investigate bivariate numerical data	Int	3	Num/Lit		
AS91032	1	Maths/Stats	Right angled triangles	Int	3	Num		
AS91038	1	Maths/Stats	Situations involving elements of chance	Int	3	Num/Lit		
AS91037	1	Maths/Stats	Demonstrate understanding of chance and data	Ext	4	Num/Lit		
					16			
<p>Related careers: An important basis for study in many subjects and future careers options</p> <p>Transferable skills: Maths skills are applicable to many future pathways</p>								

Course: Mathematics with Statistics (MAS 201)				Teacher to see: Ms Catchpole				
<p>COURSE DESCRIPTION: Mathematics with Statistics is a course aimed at students who would like to take statistics or mathematics at level 3. There is a combination of maths and statistics standards. Students are expected to work towards a merit or excellence endorsement.</p> <p>ELIGIBLE FOR COURSE ENDORSEMENT YES</p>				<p>PREREQUISITES: 14 Level 1 Maths credits including Merit + from 1.12 and 1.11 or 1.13</p>				
				<p>COSTS: Required: Graphics Calculator</p>				
Standard	Level	Domain	Title	Int / Ext	Cr	Level 1 Lit/Num	U.E. Literacy	Vocational Pathway
AS91259	2	Maths/Stats	Trigonometric relationships	Ext	3	Num		P, S, SC, CI
AS91256	2	Maths/Stats	Co-ordinate geometry methods	Int	2	Num		CI, MT, P, S,
AS91268	2	Maths/Stats	Investigate a situation involving chance	Int	2	Num/Lit		P, SC,CI
AS91264	2	Maths/Stats	Use statistical methods to make an inference	Int	4	Num/Lit		P, S, SC,CI
AS91267	2	Maths/Stats	Apply probability methods	Ext	4	Num/Lit		P, S, SC, CI
AS91583	3	Maths/Stats	Experimental design	Int	4			
Total Credits:					19			
<p>Related careers: An important basis for study in many subjects and future careers options</p> <p>Transferable skills: Maths skills are applicable to many future pathways</p>								