

MATHEMATICS

Mathematics 102 (MAT102)			Teacher to see: Mr Louie or Mrs Catchpole		
A course covering aspects of both Mathematics and Statistics. Completion of the course may lead to the MAT202 course. This course contains all internal standards.					
Prerequisites: None.					
Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards, Unit Standards	Course endorsement	No
16	0	16		UE approved	Not applicable
Future possibilities: This course can lead to MAT202 or MAS201. Future career possibilities include: Education (pre-school, primary), trades, mechanical engineering, manufacturing, hospitality, retail and tourism, armed forces and police, sports, agriculture and horticulture.					

Mathematics 202 (MAT202)			Teacher to see: Mrs Catchpole		
This is a course with a mix of Mathematics and Statistics internal standards. Predominantly for students from MAT102 or MAP203.					
Prerequisites: 10+ Level 1 Mathematics credits from Achievement Standards.					
Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	No
15	0	15		UE approved	Not applicable
Future possibilities: This course can lead to MAT302. This course is suitable for students in any of the academies. Future career possibilities include: Education (pre-school, primary), trades, manufacturing, mechanical engineering, hospitality, retail and tourism, sports, armed forces and police.					

Mathematics 203 (MAP203)			Teacher to see: Mr Louie or Mrs Catchpole		
A course containing internal Level 2 Achievement Standards. Allowing students to gain up to 14 Level 2 Mathematics credits. Also suitable for students who are looking to gain the 10 required NCEA Numeracy credits if incomplete from Year 11.					
Prerequisites: Less than 10 Level 1 Maths credits and/or no Level 1 Numeracy.					
Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	No
13	0	13		UE approved	Not applicable
Future possibilities: There is a possibility this course can lead to MAT302 in Year 13. Future career possibilities include: Trades, mechanical engineering, manufacturing, hospitality, retail and tourism, armed forces and police, sports, agriculture and horticulture.					

Mathematics 302 (MAT302)			Teacher to see: Mrs Maxlow or Mrs Catchpole		
A slower paced internal Level 3 Mathematics and Statistics course. Students will study a mixture of Level 3 Mathematics and Statistics Standards covering a broad range of ideas.					
Prerequisites: 8+ credits from any Level 2 Math course.					
Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	No
16	0	16		UE approved	Yes
Future possibilities: A good introduction to some higher level mathematics including research based statistical investigations. Education (pre-school, primary), trades, mechanical engineering, manufacturing, hospitality, retail and tourism, armed forces and police.					

Mathematics 101 with Calculus (MAC101)			Teacher to see: Mr Louie or Mrs Catchpole		
A Mathematics course focused strongly on the geometry and algebra aspects of Mathematics. Students will be expected to be working at a Merit and Excellence level.					
Prerequisites: Merit+ in 1.5 Measurement and 1.1 Number and Level 5 in Algebra and Patterns and Graphing.					
Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
6	12	18		UE approved	Not applicable
Future possibilities: Course completion may lead to either the Level 2 Calculus or Level 2 Statistics courses. Future career possibilities include: Engineering (Civil, Chemical, Structural), Architecture, Education (Secondary), Trades, Armed forces and Police, Medicine, Science (Physicist), Financial Analyst, Computer Programmer (System design).					

Mathematics with Calculus 201 (MAC201)			Teacher to see: Mrs Catchpole		
Mathematics with Calculus is a course aimed at students who would like to take Calculus at Level 3. This is a highly algebraic course. Students are expected to work towards a Merit or Excellence endorsement. It is strongly advised that students purchase a graphics calculator for this course.					
Prerequisites: Merit+ in the Level 1 1.2 MCAT (Algebra) and 1.3 Tables, Equations and Graphs externals.					
Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
9	9	18		UE approved	Not applicable
Future possibilities: This course leads to Mathematics with Calculus and/or Mathematics with Statistics at Level 3. Future career possibilities include: Engineering (civil, chemical, structural), architecture, education (secondary), trades, armed forces and police, medicine, science (physicist), financial analyst, computer programmer (system design).					

Mathematics with Calculus 301 (MAC301)			Teacher to see: Mrs Maxlow or Mrs Catchpole		
A highly academic course. Students will be expected to be aiming for achievement at Merit and Excellence level. Students will need to possess strong algebra skills for successful completion of the course. It is strongly advised that students purchase a graphics calculator for this course.					
Prerequisites: Merit+ in 2.6 Algebra and 2.7 Calculus externals from the MAC201 course.					
Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
4	17	21		UE approved	Yes
Future possibilities: Future career possibilities include: Engineering (civil, chemical, structural), architecture, education (secondary), trades, armed forces and police, medicine, science (physicist), financial analyst, computer programmer (system design)					

Mathematics and Statistics 101 (MAS101)			Teacher to see: Mr Louie or Mrs Catchpole		
A course covering aspects of both Mathematics and Statistics. Targeted at students aiming to achieve at Merit and Excellence level.					
Prerequisites: Achieved in 1.1 Number or 1.5 Measurement, L5 in Probability.					
Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
12	4	16		UE approved	Not applicable
Future possibilities: Completion of the course may lead into the Level 2 Mathematics with Statistics course. Future career possibilities include: Education, health-care and social work, media, law, accounting, sports science, scientific research, retail and tourism.					

Mathematics with Statistics 201 (MAS201)**Teacher to see:** Mrs Catchpole or Mrs Maxlow

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. It is strongly advised that students purchase a graphics calculator for this course.

Prerequisites: Merit+ in 1.12 Chance and Data external OR Achieved in 1.12 and Merit+ in 2 out of 3 of 1.10, 1.11 or 1.13 internals if from MAS101 OR Merit+ in all 3 1.10, 1.11, 1.13 if from MAT102 OR from MAC101 course with 10+ credits.

Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
15	4	19		UE approved	Not applicable

Future possibilities: This course is suitable for students wanting to take Level 3 Statistics. Future career possibilities include: Education, medicine, sports science, health-care and social work, media, law, accounting, scientific research, retail, tourism and Banking.

Mathematics with Statistics 301 (MAS301)**Teacher to see:** Mrs Maxlow or Mrs Catchpole

A highly academic course containing Statistics and Probability standards. Students will be expected to be aiming for achievement at Merit and Excellence level. Students will need to possess strong statistical insight for successful completion of the course. It is strongly advised that students purchase a graphics calculator for this course.

Prerequisites: Merit+ in 2.12 Probability external or from MAC201 or MAC301.

Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
12	8	20		UE approved	Yes

Future possibilities: This course is helpful for any students intending to study at tertiary level. Future career possibilities include: Education, medicine, health-care and social work, media, law, accounting, sports science, scientific research, retail and tourism, data scientist (statistician) and banking.