

## **Subject: MATHEMATICS & STATISTICS**

## **Head of Subject: MISS S. ROBERTSON**

	Year 13 Calculus (13MAC)	Year 13 Statistics (13MAS)
Course Content	This course prepares students for further study in areas such as	This course prepares students for further study in areas such as
	mathematics, physical science and engineering.	statistics, biology and psychology.
	Students taking Physics are strongly advised to take this course.	Students taking Biology are encouraged to take this course. And/or
	Students taking Chemistry or Commerce are encouraged to take	Calculus.
	this course.	
	This course has a large external assessment load.	
Prerequisites	Must have:	Must have:
	Trigonometric Methods 2.4	Good reading, writing and comprehension skills, as the internal
	Algebraic Methods 2.6	assessments involve writing statistical reports.
	Calculus Methods 2.7	
		Must have 12 Maths/Stats credits at Level 2
	Must have 16 Maths credits at Level 2	
		Ideally have: 2.9 Use statistical methods to make an inference
Assessment	<u>Externals</u>	<u>Externals</u>
	<b>3.5</b> Apply the algebra of complex numbers in solving problems <b>(5</b>	3.13 Apply probability concepts in solving problems (4 credits)
	credits)	3.14 Apply probability distributions in solving problems (4 credits)
	3.6 Apply differentiation methods in solving problems (6 credits)	
	3.7 Apply integration methods in solving problems (6 credits)	<u>Internals</u>
		3.2 Apply linear programming methods in solving problems (3 credits)
	<u>Internals</u>	3.8 Investigate time series data (4 credits)
	3.3 Apply trigonometric methods in solving problems (4 credits)	3.9 Investigate bivariate measurement data (4 credits)
		19 credits total
	21 credits total	
Costs	Workbooks - approximate cost \$35	Workbooks - approximate cost \$35
	Graphics Calculator (e.g. Casio FX9860GIII)	Graphics Calculator (e.g. Casio FX9860GIII)