COURSE INFORMATION **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 mathematics, physical science and engineering. Students taking Physics are strongly advised to take this course. Students taking Chemistry or Commerce are encouraged to take this course. This course has a large external assessment load.	This course prepares students for further study in areas such as statistics, biology and psychology. Students taking Biology are encouraged to take this course. And/or Calculus.
Prerequisites	**Must have:** Trigonometric Methods 2.4 Algebraic Methods 2.6 Calculus Methods 2.7 **Must have 16 Maths credits at Level 2**	**Must have:** Good reading, writing and comprehension skills, as the internal assessments involve writing statistical reports. **Must have 12 Maths/Stats credits at Level 2** **Ideally have:** 2.9 Use statistical methods to make an inference
Assessment	**<u>Externals</u>** **3.5** Apply the algebra of complex numbers in solving problems **(5 credits)** **3.6** Apply differentiation methods in solving problems **(6 credits)** **3.7** Apply integration methods in solving problems **(6 credits)** **<u>Internals</u>** **3.3** Apply trigonometric methods in solving problems **(4 credits)** **21 credits total**	**<u>Externals</u>** **3.13** Apply probability concepts in solving problems **(4 credits)** **3.14** Apply probability distributions in solving problems **(4 credits)** **<u>Internals</u>** **3.2** Apply linear programming methods in solving problems **(3 credits)** **3.8** Investigate time series data **(4 credits)** **3.15** Apply systems of equations in solving problems **(3 credits)** **18 credits total**
Costs	Workbooks - approximate cost $35 Graphics Calculator (e.g. Casio FX9860GIII)	Workbooks - approximate cost $35 Graphics Calculator (e.g. Casio FX9860GIII)