

Specialist Mathematics:

Specialist Mathematics consists of the following areas of study: 'Functions, relations and graphs' 'Algebra', 'Calculus', 'Vectors' and 'Mechanics'.

Students are expected to be able to apply techniques, routines and processes, involving rational, real and complex arithmetic, algebraic manipulation, diagrams and geometric constructions, solving equations, graph sketching, differentiation and integration related to the areas of study, as applicable, both with and without the use of technology. The appropriate use of technology to support and develop the teaching and learning of mathematics is to be incorporated throughout the units. This will include the use of some of the following technologies for various areas of study or topics: graphics calculators, spreadsheets, graphing packages, dynamic geometry systems and computer algebra systems. In particular, students are encouraged to use graphics calculators and other technologies both in the learning of new material and the application of this material in a variety of different contexts.

Familiarity with sequence and series notation and related simple applications, the use of sine and cosine rules in non-right-angled triangles and the following mathematics is assumed.

For school based assessments worth one-third of the overall assessment comprises of:-

Semester 1 2 assessments worth 20% each

Semester 2 2 assessments worth 10% each + 1 major assignment worth 40%.

Two exams are held in November:-

- 1 hour without the use of calculators or notes
- 2 hour open book and with use of technology.

