Specialist Maths 3&4

What is it and why should I do it?

Specialist Maths is a subject for students who like maths and want to challenge themselves. Topics covered include Vectors, Complex Numbers, lots of Calculus, Mechanics (which involves forces and ideas from Physics) and Statistics. The course builds on work done in Unit 1 &2 Specialist Maths but is mainly new content. There is quite a bit of overlap between the Specialist course and the maths done in first year University for students in physics or engineering streams so if you are interested in these areas this could be a subject to consider.

How much homework/study will I have?

All Unit 3 and 4 subjects require 3-5 hours of study per week.

Much of the essential practise exercise work will need to be completed for homework. It is expected that students will finish off work each night after class, and more homework will be required studying for tests and SACs.

What contributes to my study score?

3 SACs and 2 end of year Exams

Sac 1 – 4 hour Application Task 17%

Sac 2 – 2 hour Problem Solving / Modelling Task 8.5%

Sac 3 – 2 hours Problem Solving / Modelling Task 8.5%

Exam 1 – 1 hour / Short Answer questions with no notes or CAS 22%

Exam 2 – 2 hours / Multiple Choice and Extended Response Questions with notes and CAS 44%

How do I satisfactorily complete the unit?

To pass any VCE unit you need to demonstrate that you have met the Outcomes.

In Specialist Maths you meet the Outcomes primarily through your results on diagnostic topic tests (which tell you how you are going but don't count towards your study score) and SACs.

Outcome 1: On the completion of each unit the student should be able to define and explain key concepts as specified in the content from the areas of study, and apply a range of related mathematical routines and procedures.

Outcome 2: On the completion of each unit the student should be able to apply mathematical processes, with an emphasis on general cases, in non-routine contexts, and analyse and discuss these applications of mathematics.

Outcome 3: On completion of each unit the student should be able to select and appropriately use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

Give me all the details I want to know more:

VCAA Specialist Mathematics

PHSC Specialist Mathematics 3&4 Wiki Page