

VCE Maths Methods

Seymour College



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College

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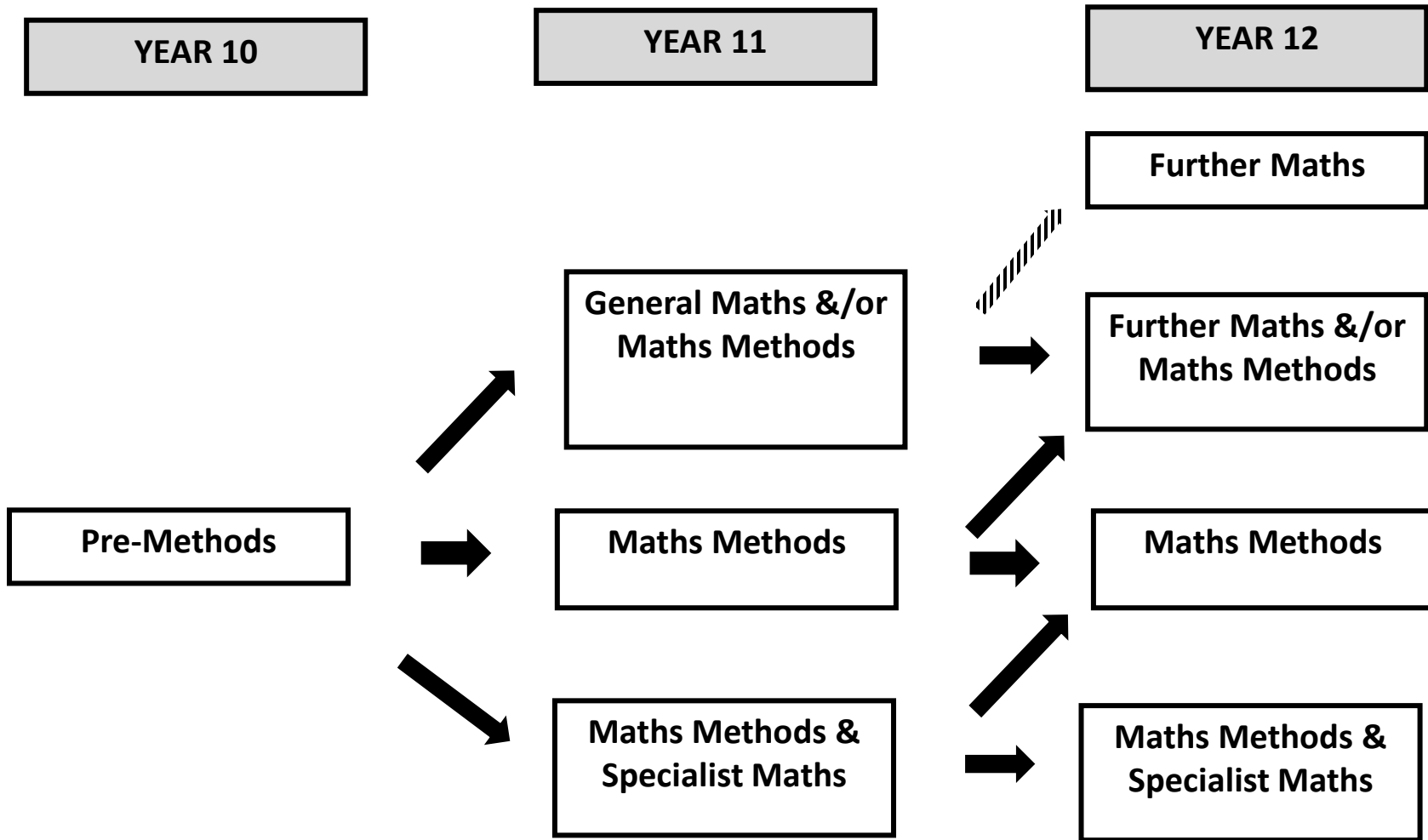
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Maths Combinations

UNITS 1 and 2	UNITS 3 and 4
Foundation Mathematics	
General Mathematics	Further Mathematics
Mathematical Methods	Mathematical Methods or Further Maths
General Maths and Maths Methods	Mathematical Methods and/or Further Maths
Mathematical Methods and Specialist Maths	Mathematical Methods and/or Specialist Maths

- There are no prerequisites for entry to Units 1,2 and 3; however, students undertaking Mathematical Methods Units 1 and 2 or Specialist Mathematics Units 1 and 2 are assumed to have a sound background in number, algebra, function, geometry, probability and statistics.
- Students must undertake Unit 3 prior to undertaking Unit 4.
- Enrolment in Specialist Mathematics Units 3 and 4 assumes a current enrolment in, or previous completion of, Mathematical Methods Units 3 and 4.
- Each unit involves at least 50 hours of scheduled classroom instruction over the duration of a semester.

1. Maths Methods Pathways



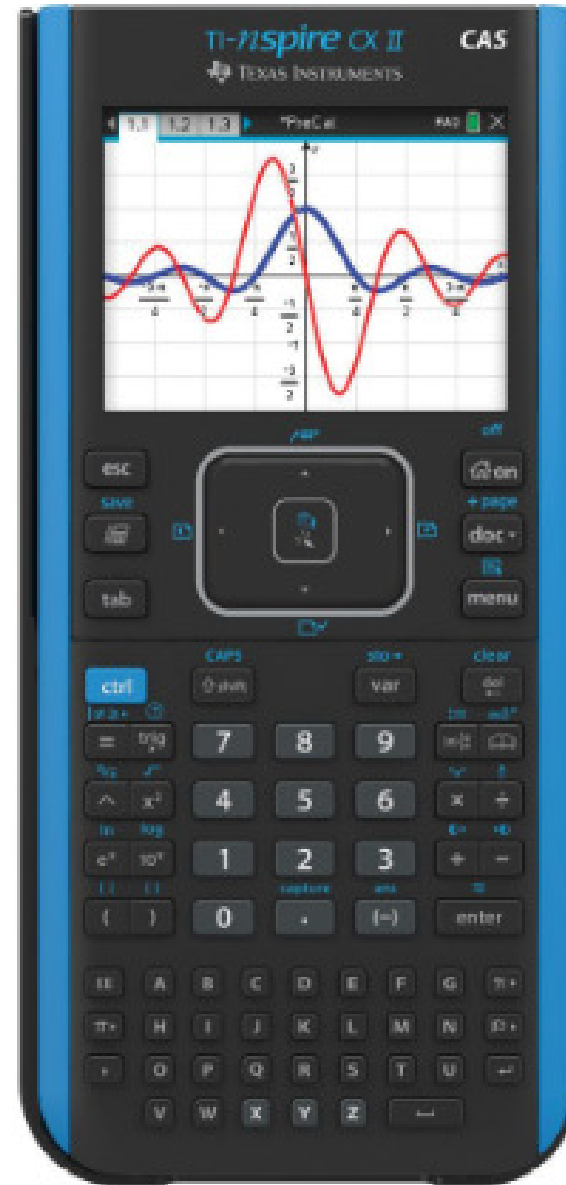
2. VCE Maths Methods overview

MATHEMATICAL METHODS Units 1 and 2 are completely prescribed and provide an introductory study of simple elementary functions, algebra, calculus, probability and statistics and their applications in a variety of practical and theoretical contexts. They are designed as preparation for Mathematical Methods Units 3 and 4 and cover assumed knowledge and skills for those units.

MATHEMATICAL METHODS Units 3 and 4 are completely prescribed and extend the study of simple elementary functions to include combinations of these functions, algebra, calculus, probability and statistics, and their applications in a variety of practical and theoretical contexts. They also provide background for further study in, for example, science, humanities, economics and medicine.

Approved Technology

At Seymour College we use the TI-Nspire CAS calculator for all VCE Maths Subjects.



Assessment – School Based

Contribution to final assessment School-assessed Coursework will contribute 17 per cent to the study score for each of Units 3 and 4.

UNIT 3

Application task A function and calculus-based mathematical investigation of a practical or theoretical context.

The application task is to be of 4–6 hours duration over a period of 1–2 weeks.

UNIT 4

Two Problem solving and Modelling tasks:

Task 1 : Functions and Calculus

Task 2: Probability and Statistics

The modelling or problem-solving tasks are to be of 2–3 hours duration over a period of 1 week.

Assessment - External

END OF YEAR EXAMINATIONS

Examination 1

Short answer and no technology

1 hour

This examination contributes 22% to the final assessment.

Examination 2

Multiple choice and Extended answer

Technology plus bound book

2 hours

This examination contributes 44% to the final assessment.

Careers and pathways

A lot of courses, particularly in the fields of science, economics, engineering and biomedicine require students to have completed Maths Methods.

Looking to the Future with Mathematical Methods CAS.....

Post-secondary Education: Engineering, Computer Science, Medicine, Biomedicine, Dentistry, Veterinary Science, Accounting, Commerce, Information Technology, Aviation, Nanotechnology, Radiography, Pharmacy, Science, Applied Science, Environments, etc.

Employment: Engineer, Accountant, Surveyor, Pilot, Geophysicist, Medical Practitioner, Computer Programmer, Biochemist, Naval Architect, Meteorologist, Optometrist, Psychiatrist, Quantity Surveyor, Mathematics Teacher, Astronomer, Financial Advisor, Actuary, Army/Navy/Airforce Officer...

Life Skills: This subject teaches students to break down difficult and long problems into logical sequences. It will aid with the development of strong mathematical problem solving skills useful in both work and in daily life