



Core Mathematics

What is Core Mathematics?

The mathematics in Core Mathematics is developed to facilitate planning. Students are asked to examine what has happened and what is happening in the world around them and to consider their findings. This empowers them to describe their world and changes in it. As a result, students see the relevance of the mathematics inherent in planning decisive courses of action to resolve issues.

Core Mathematics is designed for students who are considering studying Stage 2 Mathematical Methods.

Why study Core Mathematics?

Core Mathematics examines what has happened and what is happening in the world by looking at mathematics as a creative human response to the external environment through the study of contemporary situations and case studies.

Course content of Core Mathematics

Students study this subject over two semesters.

Semester 1 topics:

- Topic 1: Algebra
- Topic 2: Functions and Graphs
- Topic 3: Trigonometry

Semester 2 topics are:

- Topic 1: Probability and Statistics
- Topic 2: Models of Growth
- Topic 3: Matrices and Linear Programming

Assessment Components

Assessment in Core Mathematics is conducted per semester and consists of the following components for SACE, weighted as shown:

- Two folio tasks 20% each
- Three topic tests 20% each

Students must also complete a semester examination on all of the content covered throughout the semester. This examination is included in the Trinity Grade where each task is weighted equally.

Learning Outcomes of the Course

At the end of the program in Stage 1 Core Mathematics, students should be able to:

- understand mathematical concepts and relationships, making use of electronic technology where appropriate to aid and enhance understanding
- identify, collect, and organise mathematical information relevant to investigating and solving problems taken from social, scientific, economic, or historical contexts
- recognise and apply the mathematical techniques needed when analysing and solving a problem in context
- interpret results, draw conclusions, and reflect on the reasonableness of these in the context of a problem
- communicate mathematical reasoning and ideas by using appropriate language and representations
- work both independently and cooperatively in planning, organising, and carrying out mathematical activities.

Core Mathematics continued

Future Pathways in Core Mathematics

- Accounting
- Management
- Computer Studies
- Health Sciences
- Business
- Commerce
- Psychology

Required Texts for Core Mathematics

- Mathematics for Yr 11: Functions, Statistics and Chance, with CD (6th edition), Haese
- Mathematics for Yr 11: Geometry and Trigonometry, with CD (5th edition), Haese
- Calculator: Casio Graphic FX-9860GAU PLUS

What are the prerequisites?

- C+ promotion grade in Year 10 Core Mathematics.
- C⁻ promotion grade in Year 10 Extension Mathematics.



TRINITY COLLEGE
Senior

Contact Details

For more information about studying Year 11 at Trinity College Senior, please contact the Head of Year 11 on 8523 8705 or visit: www.trinity.sa.edu.au/curriculum/index.htm

Further Information

More information about SACE may be obtained from the SACE Board of South Australia webpage at: www.sace.sa.edu.au