



Specialist Mathematics

Description

Specialist Mathematics provides a course of study for students who wish to undertake an in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling, problem solving and reasoning. This study has a focus on interest in the discipline of mathematics in its own right and investigation of a broad range of applications, as well as development of a sound background for further studies in mathematics and mathematics related fields. Enrolment in Specialist Mathematics assumes a current enrolment in, or previous completion of, the equivalent Units of Mathematical Methods.

Unit Topics

Unit 1 - Specialist Mathematics Unit 1

Unit 2 - Specialist Mathematics Unit 2

Unit 3 - Specialist Mathematics Unit 3

Unit 4 - Specialist Mathematics Unit 4

Skill Development

Students will study aspects of pure mathematics, and further develop the ability to apply mathematical principles to real life problems. This will include the development of topic specific skills, mathematical reasoning, estimation, problem solving, and the use of technology.

Possible Assessment Tasks

Typical Assessment tasks would include tests, and assignments that would investigate some application of the skills developed in the topics covered. Appropriate use of technology in both tests and assignments also contributes to successfully completing each unit.

Activities/Camps/Excursions

Study of simple elementary functions such as linear and quadratic equations, trigonometry, calculus, probability and statistics, and their applications in a variety of practical and theoretical contexts.

Career Options

Specialist Mathematics is highly recommended for students considering future studies in Mathematics, Engineering, Sciences, Information Technology, Law and Medicine related courses. Completion provides bonus marks for many of these Tertiary courses.