
CORE PROGRAM

Accelerated Mathematics

DURATION OF SUBJECT

Full year

COURSE DESCRIPTION

Selected students are invited to take part in the Accelerated Mathematics program at Year 9, wherein students study one of two possible Year 10 Mathematics subjects. Selection is based on a strict set of criteria based on Mathematical understanding, standardised testing results and academic performance, as well as the student's dedication to learning and work ethic in Middle School. A mature application of knowledge is also sought. A selection panel will determine which Accelerated Mathematics program students are invited to participate in. Students who are selected will receive regular monitoring of their progress as per established procedures.

10 MATHEMATICS 1 AND 2

This study of mathematics will assist students to; think critically and act logically to evaluate situations, solve problems and make decisions, identify patterns and form generalisations, use technology, instruments, tools, and information systems, effectively communicate ideas and information, plan and organise activities and collaborate. It provides students with a mathematical base with emphasis on content which will be of use in society. This will be complemented with skill development in appropriate technologies. They will develop knowledge in the areas of Money and Financial Arithmetic, Measurement, Simple Algebra, Linear Functions and Graphing, Geometry, Probability and Statistics. Technology to support the learning of mathematics will be incorporated throughout the course in the use of CAS calculators, spreadsheets, graphing packages and computer algebra systems.

This subject forms a solid basis for the Advanced Mathematics course in Year 10.

10 ADVANCED MATHEMATICS

The study of Advanced Mathematics will assist students to think critically and act logically to evaluate situations, solve problems and make decisions, identify patterns and form generalisations, use technology, instruments, tools, and information systems, effectively communicate ideas and information, plan and organise activities and collaborate with others. This course provides a sound background in Number, Algebra, Function, Measurement, Geometry, Probability and Statistics. The appropriate use of technology to support the learning of mathematics will be incorporated throughout the course in the use of CAS calculators, spreadsheets, graphing packages and computer algebra systems.

This study provides extended mathematical training for those students who wish to continue their studies in Functions, Algebra and Calculus. Students choosing this subject generally intend to continue to a tertiary level of study which may require mathematics as a prerequisite for entry. Advanced Mathematics contains additional content suitable for development of student mathematical background in preparation for further study of Functions, Algebra, Calculus, Statistics and Trigonometry.

Students satisfactorily completing Advanced Mathematics may continue into VCE studying any combination of Unit 1/2 Mathematics.