General Mathematics

Units 1-2

General Mathematics provides for different combinations of student interests and preparation for study of VCE Further Mathematics at the Unit 3 and 4 level. This subject provides a pathway for students that require mathematics as entry for future study and career paths.

Students in this course must have an approved CAS calculator.

UNIT 1
Students will study Computation and Practical Arithmetic, Investigating and Comparing Data Distributions, Linear Relations and Equations, Linear Graphs and Modelling, and Matrices.

LEARNING ACTIVITIES
Textbook exercises, online revision activities and an application task.

KEY SKILLS REQUIRED
Mathematical skills and understanding, graphing calculator technology, application of mathematical skills and knowledge.

ASSESSED TASKS
Topic tests, online activities, an application task and an end of semester written examination.

UNIT 2
Students will study Investigating relationships between two numerical variables, Number Patterns & Recursion, Shape and Measurement, Applications of Trigonometry.

LEARNING ACTIVITIES
Textbook exercises, online revision activities and an application task.

KEY SKILLS REQUIRED
Mathematical skills and understanding, graphing calculator technology, application of mathematical skills and knowledge.

ASSESSED TASKS
Topic tests, online activities, an application task and an end of semester written examination.

General Mathematics

Units 3-4

Further Mathematics can be taken on its own or with Mathematics Methods Units 3 and 4.

Students undertaking Further Mathematics should have successfully completed either Specialist, General Mathematics or Mathematical Methods Units 1 and 2. Students in this course must have an approved CAS calculator.

Note: Foundation Mathematics does not provide a basis for undertaking Further Mathematics.

UNIT 3
In this unit students will study Data Analysis including describing and summarising data, investigate associations between variable, data transformations and modelling time series. Students will also study Recursion and Financial Modelling including modelling growth and decay using recursion and modelling and analysing reducing balance loans and annuities. Students use CAS calculators to explore skills and concepts.

LEARNING ACTIVITIES
Textbook exercises, revision activities and application tasks.

KEY SKILLS REQUIRED
Mathematical skills and understanding, graphing calculator technology, application of mathematical skills and knowledge.

ASSESSED TASKS
Topic tests, analysis task, application task.

UNIT 4
In this unit students will study a module on Networks and Decision Mathematics including the use of networks to model and solve problems involving connection, flow, allocation and scheduling and a module on Matrices. Students use CAS calculators to explore skills and concepts.

LEARNING ACTIVITIES
Textbook exercises, revision activities and application tasks.

KEY SKILLS REQUIRED
Mathematical skills and understanding, CAS technology, application of mathematical skills and knowledge.

ASSESSED TASKS
Topic tests, analysis task, application task. Students will also complete two end of year examinations.

VCAA ASSESSMENT – The overall Study Score will consist of:
School Assessed Coursework (34%), 1 ½ hour written Examination 1 in November (33%), 1 ½ hour written Examination 2 in November (33%).