



# General Mathematics

## Description

*General Mathematics Units 1- 4 is designed to be widely accessible and provide preparation for general employment, business or further study.*

## Unit Sequence/Skills Development

### **Unit 1 - General Mathematics**

- Data Analysis (types, displaying, distributions, summary statistics for centre and spread)
- Number & Algebra (linear relationships, arithmetic & geometric sequences, financial maths)
- Graphs (linear, modelling, simultaneous equations)
- Matrices (solving practical problems, population growth & decay)

### **Unit 2 - General Mathematics**

- Data Analysis (modelling bivariate data, association and causation)
- Graphs & Networks (connectedness, shortest path, minimum spanning trees)
- Variation (direct and indirect variation, modelling non-linear relationships)
- Measurement (two and three dimensional, scale, Pythagoras, trigonometry)

### **Unit 3 and 4 - General Mathematics**

- Data Analysis
- Financial Maths (interest, appreciation, depreciation, loans, annuities and perpetuities)
- Matrices (2 and 3 step dominance, communication and transition matrices)
- Networks (travel, connection, flow, matching, allocation and scheduling problems)

## Possible Assessment Tasks

### **Assessment tasks for Unit 1 and 2**

*Assessment tasks for Unit 1 and 2 could include; assignments, tests, solutions to worked questions, summary/review notes, modelling tasks, problem-solving tasks, and mathematical investigations. These will involve the appropriate use of technology (CAS calculator required). All assessments for Units 1 and 2 are school-based, procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.*

### **Assessment Units 3 and 4 (Scientific calculator required)**

*Unit 3 School-assessed Coursework will contribute 24% to the study score and Unit 4 School- assessed Coursework will contribute 16% to the study score. Level of achievement is also assessed by two end-of-year examinations of 1.5 hours duration, which contribute 60% of the study score, each contributing 30% to the study score. (CAS calculator required).*

## Career Options

*Business, Nursing, Education - most careers require a level of maths competency (NOTE: at time of writing Tertiary Education have not indicated what level of Mathematics is required for specific courses for 2025 entry)*