

Foundation Mathematics:

Units 1 and 2

In Foundation Mathematics there is a strong emphasis on using mathematics in practical contexts relating to everyday life, recreation, work and study. Students are encouraged to use appropriate technology in all areas of their study. These units will be especially useful for students undertaking VET studies and/or the VCAL.

The areas of study for Units 1 and 2 of Foundation Mathematics are 'Space, shape and design', 'Patterns and number', 'Handling data' and 'Measurement'.

At the end of Unit 1, students will be expected to have covered material equivalent to two areas of study. All areas of study will be completed over the two units. Unit 2 can be used to complement Unit 1 in development of the course material.

Further Mathematics:

Units 3 and 4:

Further Mathematics consists of a compulsory core area of study 'Data analysis' and then a selection of three from six modules in the 'Applications' area of study. Unit 3 comprises the 'Data analysis' area of study which incorporates a statistical application task, and one of the selected modules from the 'Applications' area of study. Unit 4 comprises the two other selected modules from the 'Applications' area of study.

Assumed knowledge and skills for the 'Data analysis' area of study are contained in the topics: Univariate data, Bivariate data, Linear graphs and modelling, and Linear relations and equations from General Mathematics Units 1 and 2.

The appropriate use of technology to support and develop the teaching and learning of mathematics is to be incorporated throughout the units. This will include the use of some of the following technologies for various areas of study or topics: graphics calculators, spreadsheets, graphing packages, statistical analysis systems, dynamic geometry systems, and computer algebra systems. In particular, students are encouraged to use graphics calculators, spreadsheets or statistical software in 'Data analysis', dynamic geometry systems in 'Geometry and trigonometry' and graphics calculators, graphing packages or computer algebra systems in the remaining areas of study, both in the learning of new material and the application of this material in a variety of different contexts.

There are two areas of study:

1. Data analysis – core material
2. Applications – module material:
 - Module 1: Number patterns
 - Module 2: Geometry and trigonometry
 - Module 3: Graphs and relations
 - Module 4: Business-related mathematics
 - Module 5: Networks and decision mathematics
 - Module 6: Matrices

