Subject name General Mathematics<br>Subject code<br>Subject type<br>Subject fee<br>Prerequisites<br>MAG<br>General<br>Nil<br>Minimum C Year 10 Semester 2 General Maths

## Course overview

This subject has been developed - with input from university providers with a broad range of university course requirements in mind - to provide the mathematics needed for students entering a wide range of university courses. As seen below in the course outline, there is still some algebraic competency required, but this is much less than required for Mathematical Methods and Specialist Mathematics.
For students considering studying General Mathematics who are not intending to go on to University, you should first consider the Essential Mathematics option as this was the subject created - with input from TAFE and training providers - with non-university-orientated students in mind. Although the summative assessment may seem similar in both subjects, the General Mathematics exams are longer, covering a greater range of topics. Also, the time students have to work on the Problem Solving and Modelling Task is shorter in General Mathematics, with less class-time given to working on the task. A non-university pathway student choosing Essential Mathematics will have a higher chance of being successful in mathematics than if electing to do General Mathematics.
Does this mean you cannot do General Mathematics if you are planning on doing a non-university pathway for senior? No, you can. However, you need to realise the demands of this subject will be higher than Essential Mathematics, requiring significant time spent doing extra study and practice outside of class lesson time. Also, with the demands of many vocational pathways, you may find yourself missing a mathematics lesson each week. To catch up missed learning in General Mathematics will be much more challenging than it would be in Essential Mathematics. It is strongly suggested that you would be already achieving a B result or better to consider selecting General Mathematics when on a non-university pathway with your other senior subject selections.

Course outline

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
| :---: | :---: | :---: | :---: |
| Money, measurement, algebra and linear equations <br> - Consumer arithmetic <br> - Shape and measurement <br> - Similarity and scale <br> - Algebra <br> - Linear equations and their graphs | Applications of linear equations and trigonometry, algebra, matrices and univariate data <br> - Applications of linear equations and their graphs <br> - Applications of trigonometry <br> - Matrices <br> - Univariate data analysis | Bivariate data, sequences and time series analysis, and Earth geometry <br> - Bivariate data analysis <br> - Time series analysis <br> - Growth and decay in sequences <br> - Earth geometry and time zones | Investing and networking <br> - Loans, investments and annuities <br> - Graphs and networks <br> - Networks and decision mathematics |

## Assessment

Assessments in Unit 1 and Unit 2 are formative and are devised to replicate Internal assessments used in Unit 3 and Unit 4. In Unit 3 and Unit 4 students complete four summative assessments. For Year 12 the results from each of the internal assessments are combined with the external assessment result to provide a subject score out of 100. Students will also receive an overall exit subject result from QCAA that is $A$ to $E$.

## Summative assessments

| Unit 3 |  | Unit 4 |  |
| :---: | :---: | :---: | :---: |
| Summative internal assessment 1: <br> Problem-solving and modelling task (4 weeks, 3 class lessons) |  |  | 20\% |
| Summative internal assessment 2: Examination ( 90 minutes) | 15\% | Summative internal assessment 3: Examination ( 90 minutes) | 15\% |
| Summative external assessment covering Units 3 and 4 ( $2 x$ one and a half hour exams) |  |  | 50\% |

## Course requirements

Students will be required to have a TI-30XB Multiview Scientific Calculator.. These are available for purchase from the Textbook Office for approximately $\$ 25.00$

## Career opportunities

A course of study in General Mathematics can establish a basis for further education and employment in fields such as: Business, Commerce, Education, Finance, IT, Social Science and The Arts.

