

# Mathematics A

## MATHEMATICS A

The study of mathematics is not compulsory but it is very important for building the skills for further study, employment and living in the modern world.

Having decided to study mathematics, you will need to choose carefully the course which best suits your needs. Before making this decision you should talk to your maths teacher at high school, college maths teachers, and careers advisers. You should consider:

- your ability and interest in mathematics
- your performance in Year 10 mathematics
- the mathematical requirements of your career preferences

If your aim is to study at university and the level of maths that you studied in Year 10 was high enough (for example, successfully studying Mathematics A in Year 10) you should plan to study T Maths (see other flier).

If, however, you wish to study maths at a less specialised level, for example, to gain skills for CIT study or employment, then A Maths is the appropriate level.

## ESSENTIAL MATHEMATICS A

Essential Mathematics focuses on using mathematics effectively, efficiently and critically to make informed decisions. It provides students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning and community settings. This subject provides the opportunity for students to prepare for post-school options of employment and further training.

## CONTEMPORARY MATHEMATICS A

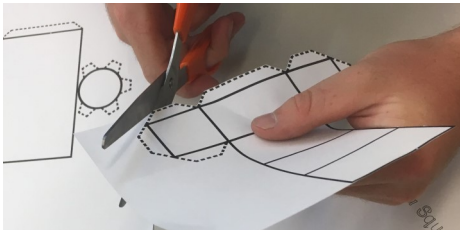
This course is designed to meet the needs of students who are not otherwise catered for in the new courses integrating the Australian Curriculum. The major themes of Contemporary Mathematics A/M are the numeracy skills students will require in employment post-college and to manage their personal finances.

## ESSENTIAL MATHEMATICS A

### Units (Semester length)

**Unit 1** provides students with the mathematical skills and understanding to solve problems relating to calculations, applications of measurement, the use of formulas to find an unknown quantity, and the interpretation of graphs.

- Calculations, percentages and rates
- Measurement
- Algebra
- Graphs



**Unit 2** provides students with the mathematical skills and understanding to solve problems related to representing and comparing data, percentages, rates and ratios, and time and motion.

- Representing and comparing data
- Percentages
- Rates and ratios
- Time and motion

**Unit 3** provides students with the mathematical skills and understanding to solve problems related to measurement, scales, plans and models, drawing and interpreting graphs, and data collection.

- Measurement
- Scales, plans and models
- Graphs
- Data collection

**Unit 4** provides students with the mathematical skills and understanding to solve problems related to probability, earth geometry and time zones, and loans and compound interest.

- Probability and relative frequencies
- Earth geometry and time zones
- Loans and compound interest



## CONTEMPORARY MATHEMATICS A

### Units (Semester length)

In **Unit 1**, students will study numeracy in the workplace (for example, income and payroll maths, workplace problem solving, mathematics for Industry and VET).

- Income and Payroll Maths
- Workplace problem solving
- Mathematics for Industry and VET
- Negotiated Study

In **Unit 2**, students will study financial numeracy (for example, money management, banking and financial loans).

- Money Management
- Banking and Financial Planning
- Negotiated Project

In **Unit 3**, students will study numeracy skills for living, for example - budget, tenancy, mathematics of transport and travel.

- Budget and Tenancy
- Mathematics of Transport
- Mathematics of Travel
- Independent Mathematical Project

In **Unit 4**, students will study numeracy skills required for maintaining personal and supporting others' health. It includes, maths relating to nutrition, diet, medication and exercise.

- Mathematics in Health
- Mathematics in Sport
- Maths for Nursing and Ageing
- Negotiated Study

