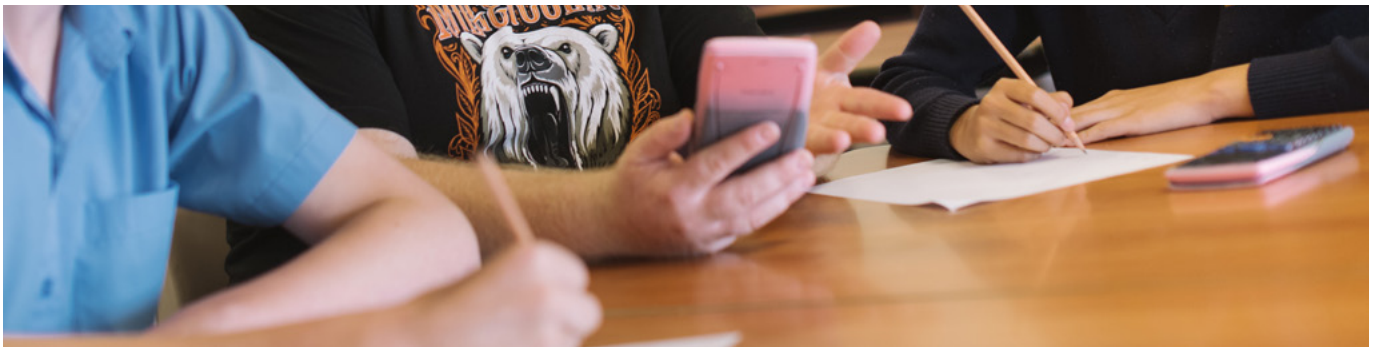
MATHEMATICS



You have:	TASC subjects	May lead to:
An interest or need to develop mathematical skills for work or life	**Everyday Maths 1**	Essential Skills - Maths 2 Workplace Maths 2
	Essential Skills - Maths 2	Training or job where mathematical skills are required
'D' in Year 10 Australian Curriculum Mathematics	**Workplace Maths 2**	
'C' in Year 10 Australian Curriculum Mathematics Basic algebra skills	**General Mathematics Foundation 2**	General Mathematics 3 Training or job where mathematical skills are required
'B' in Year 10 Australian Curriculum Mathematics Good algebra skills	**Mathematics Methods Foundation 3**	Mathematics Methods Foundation 4 General Mathematics 3
'B' in Year 10 Australian Curriculum Mathematics	**General Mathematics 3**	University study in fields requiring mathematics
'B' in Year 10 and Mathematics Methods Foundation 2 Or Year 10A Australian Curriculum Mathematics with some calculus	**Mathematics Methods 4**	Mathematics Specialised 4 Required by the University of Tasmania and some mainland universities as pre-requisite for further study in some areas
Mathematics Methods 3	**Mathematics Specialised 4**	A recommended subject for university courses in Science, Technology, Engineering and Mathematics (STEM). Please see university guides for details.

level 1 level 2 level 3 level 4

UNIVERSITY of TASMANIA

University College Program: Extension Program for Mathematics Methods

The 2017 University College Program offers an extension program for Mathematics Methods. This program aims to strengthen the essential algebraic skills needed for pre-tertiary Mathematics and to undertake further study requiring a mathematical background at university level.

Enrolment in this program (at the same time as you are enrolled in the relevant Level 3/4 subject) will not only help to expand your knowledge and understanding of this learning area, but also provides a HECS-free pathway into study at the University of Tasmania. To find out more, ask your teacher.

TASC subjects

Everyday Maths 1
MTE110114

YOU WILL LEARN ABOUT:

- Mathematical applications for practical daily situations
- Whole numbers, decimals and percentages
- Basic arithmetic, time, money and measurement
- Common 2D and 3D diagrams, maps and diagrams
- Collecting and interpreting everyday data.

YOU DO THIS BY STUDYING:

- Basic operations
- How to measure length, distance, time and interpret maps
- How to work with money and budgeting
- How to collect and interpret data.

LEARNING ACTIVITIES MAY INCLUDE:

- Tasks and assignments.

TO ENROL IN THIS SUBJECT YOU NEED:

- An interest or need to develop mathematical skills.

THIS SUBJECT:

- Prepares you to undertake everyday number skills
- May be a pathway to *Essential Skills Maths 2* or *Workplace Maths 2*
- Contributes 10 credit points for the Tasmanian Certificate of Education.

Essential Skills Maths 2
MTN210114

YOU WILL LEARN ABOUT:

- Everyday numeracy and mathematical skills.

YOU DO THIS BY STUDYING:

- Numbers, maps, tables and graphs
- Problems that involve measurement, numbers, money and interpreting maths information, especially in everyday life and work situations
- Ways to communicate maths information.

LEARNING ACTIVITIES MAY INCLUDE:

- Practical tasks and investigations, research and assessments.

TO ENROL IN THIS SUBJECT YOU NEED:

- An interest or need to develop mathematical skills.

THIS SUBJECT:

- Equips you with basic knowledge and skills for the workplace and daily living
- Contributes 10 credit points and meets the standard for everyday adult mathematics skills for the Tasmanian Certificate of Education.

Workplace Maths 2
MTW215114

YOU WILL LEARN ABOUT:

- Basic operations
- Problem-solving strategies
- Measurement
- Finance
- Mathematical challenges that confront young adults.

YOU DO THIS BY STUDYING:

- Percentages, fractions, decimals
- Consumer finance
- Measurement, scale and metric units.

LEARNING ACTIVITIES MAY INCLUDE:

- A number of practical and investigative tasks
- Regular assignments.

TO ENROL IN THIS SUBJECT YOU NEED:

- A D in Year 10 Australian Curriculum Mathematics
- An interest or need to develop mathematical skills.

THIS SUBJECT:

- Equips you with a range of mathematical skills and experiences as preparation for entry to the workforce, particularly in the areas of retail, hospitality and apprenticeships
- Contributes 15 credit points and meets the standard for everyday adult mathematics skills for the Tasmanian Certificate of Education.

General Mathematics Foundation 2
MTG215114

YOU WILL LEARN ABOUT:

- Practical problems linked to a range of mathematical concepts
- Graphics calculators and computer software that support understanding of concepts.

YOU DO THIS BY STUDYING:

- Linear equations and their graphs
- Consumer arithmetic
- Shapes and measurement
- Data
- Matrices and networks.

LEARNING ACTIVITIES MAY INCLUDE:

- A range of investigative tasks which reflect the practical use of mathematics in problem solving
- Topic assignments and tests.

TO ENROL IN THIS SUBJECT YOU NEED:

- Some basic algebra skills
- C in Year 10 Australian Curriculum Mathematics.

THIS SUBJECT:

- Provides access to graphics calculators during class time
- Prepares students who wish to further their mathematics education before seeking employment or attempting a range of post-secondary courses
- Provides a pathway to *General Mathematics 3* and employment or further studies in areas where a sound mathematical understanding is essential, such as banking or technical courses
- Contributes 15 credit points and meets the standard for everyday adult mathematics skills for the Tasmanian Certificate of Education.

Mathematics Methods Foundation 3
MTM315***

YOU WILL LEARN ABOUT:
- Algebraic skills which can be further developed in subsequent subjects
- CAS graphics calculators and computers that support the understanding of concepts.

YOU DO THIS BY STUDYING:
- Mathematical skills and problems in areas of algebraic modelling, functions and graphs, trigonometry, calculus and probability
- The use of graphics calculators and computers in understanding applied concepts.

LEARNING ACTIVITIES MAY INCLUDE:
- Investigations
- Assignments and tests.

TO ENROL IN THIS SUBJECT YOU NEED:
- A CAS graphics calculator
- Very good algebra skills
- B in Year 10 Australian Curriculum Mathematics.

THIS SUBJECT:
- Is preparation for *Mathematics Methods 4* or *General Mathematics 3*
- Contributes 15 credit points and meets the standard for everyday adult mathematics skills for the Tasmanian Certificate of Education.

General Mathematics 3
MTG315115

YOU WILL LEARN ABOUT:
- Mathematical skills which will enable you to solve problems in the real world in areas of finance, bivariate data analysis, graphs and networks, growth and decay, and trigonometry
- Using graphics calculators and computers to support an understanding of applied concepts.

YOU DO THIS BY STUDYING:
- Mathematical skills and problems in areas of finance, bivariate data, graphs and networks, sequences and series, and trigonometry.
- The use of graphics calculators and computers in understanding applied concepts.

LEARNING ACTIVITIES MAY INCLUDE:
- Investigations
- Assignments and tests.

TO ENROL IN THIS SUBJECT YOU NEED:
- A CAS graphics calculator
- B in Year 10 Australian Curriculum Mathematics or a CA in *General Mathematics Foundation 2*, or an SA in *Mathematics Methods Foundation 2*.

THIS SUBJECT:
- Is a strong foundation for careers such as nursing, tourism management and banking or for further study in fields requiring mathematics, such as teaching and accounting
- Is a pre-requisite for studies in some tertiary courses
- Contributes 15 credit points and meets the standard for everyday adult mathematics skills for the Tasmanian Certificate of Education.

Mathematics Methods 4
MTM415***

YOU WILL LEARN ABOUT:
- Algebraic skills and their real-world relevance
- CAS graphics calculators and computers that support the understanding of algebraic concepts.

YOU DO THIS BY STUDYING:
- Functions and graphs
- Circular (trigonometric) functions
- Differential and integral calculus
- Probability and statistics.

LEARNING ACTIVITIES MAY INCLUDE:
- Problem solving
- Assignments and tests.

TO ENROL IN THIS SUBJECT YOU NEED:
- A CAS graphics calculator
- B in Year 10 Australian Curriculum Mathematics and an SA in *Maths Methods Foundation 2*
- Or with counselling, a B in Year 10A Australian Curriculum Mathematics (this must include some early calculus studies).

THIS SUBJECT:
- Satisfies minimum pre-requisites for entry into Pure Maths at university
- Meets requirements of tertiary subjects in computer science, surveying, the sciences, pharmacy and general engineering
- Provides a pathway to *Mathematics Specialised 4*
- Is a pre-requisite to a number of courses at university and required for some mainland university courses
- Contributes 15 credit points and meets the standard for everyday adult mathematics skills for the Tasmanian Certificate of Education.

Mathematics Specialised 4
MTS415114

YOU WILL LEARN ABOUT:
- Pure algebraic skills and their real world relevance
- CAS graphics calculators and computers that support the understanding of algebraic concepts.

YOU DO THIS BY STUDYING:
- Complex numbers
- Matrices
- Sequences and series
- Differential and integral calculus applications.

LEARNING ACTIVITIES MAY INCLUDE:
- Investigations and problem solving
- Assignments and tests.

TO ENROL IN THIS SUBJECT YOU NEED:
- *Mathematics Methods 3*
- A CAS graphics calculator.

THIS SUBJECT:
- Provides an excellent foundation for students undertaking university studies in mathematics, science or engineering
- Is recommended for entrance into some mainland university courses
- Contributes 15 credit points and meets the standard for everyday adult mathematics skills for the Tasmanian Certificate of Education.