



# General Mathematics Level 2-3

## Scoping Paper

### Years 9 to 12 Learning 2020 Course Development

#### **The purpose of this scoping paper**

The purpose of this paper is to provide information regarding the scope of the proposed *General Mathematics Course* Level 2-3 including the:

- *Rationale*
- *Relationship to:*
  - *Senior Secondary Australian Curriculum (where applicable)*
  - *Years 9 to 12 Curriculum Framework*
  - *General Capabilities*
- Existing pathways and possible Future Provision
- Course Design

It is designed to enable all interested stakeholders to reflect and provide initial feedback on the rationale and relationships as italicised above. The additional information is included for noting.

Additionally in consideration of the information provided in this scoping paper we are seeking your suggestions for the core concepts, big ideas, essential learnings or important considerations you would like to see included in this proposed course.



## Consultation

Throughout the course development process there will be four opportunities for formal stakeholder consultation:

- Course Scope
- Structural Overview and Key features (November/December 2020)
- Initial Draft Course (March 2021)
- Final Draft Course (June 2021)

This scoping paper represents the first of four course consultation points for teachers to engage in the course development process for *General Mathematics Course* Level 2-3.

## Course Rationale

The *General Mathematics* suite of courses are designed to develop learners' understanding of concepts and techniques drawn from number and algebra, trigonometry and world geometry, sequences, finance, networks and decision mathematics and statistics. This breadth of mathematical experience will enable learners to apply mathematical concepts and fluently perform techniques to solve applied problems, synthesise mathematical information, design and conduct mathematical investigations to calculate, describe and communicate possible solutions. The *General Mathematics* suite of courses will enable learners the opportunity to develop the foundations for study in many disciplines at tertiary level and in the applications of those disciplines. Mathematics and numeracy provide a way of interpreting everyday practical situations, and provide the basis for many informed personal decisions.

This suite of courses will enable learners to develop their mathematical expertise such that they may contribute productively in an ever-changing global economy, with both rapid revolutions in technology and global and local social challenges. This is a key factor in ensuring Tasmania and Australia's current and emerging needs are met as an economy competing globally requires substantial numbers of mathematically expert professionals such as teachers, engineers, economists, scientists, social scientists and planners.

## Years 9 to 12 Curriculum Framework

[Years 9 to 12 Education Framework](#) informs the design of *General Mathematics* Levels 2-3 course and it fits within the Discipline-based focus area of the [Years 9 to 12 Curriculum Framework](#).

## Pathways

The *General Mathematics* Level 2-3 course enables learning continuity from: Years 9-10 Australian Curriculum Mathematics and to additional Years 11-12 Level 3-4 and tertiary offerings through sequenced learning pathways.

## Relationship to the Senior Secondary Australian Curriculum

*General Mathematics* Level 2-3 aligns with Senior Secondary Australian Curriculum General Mathematics Units 1-4. As such *General Mathematics* Level 2-3 are equivalent to offerings in Victoria, NSW, SA, WA, NT, ACT and Queensland that similarly align to Senior Secondary Australian Curriculum General Mathematics.

## Australian Curriculum General Capabilities

The *General Mathematics* Level 2-3 course is designed to enable teachers to design courses of study which draw on the cross curriculum priorities and develop the General Capabilities: Literacy, ICT, Critical and Creative Thinking, Ethical Understanding, Personal and Social Capability and Intercultural Understanding.

## Relationship to Replacement courses

*General Mathematics* Level 2-3 is a replacement for General Mathematics – Foundation MTG215114 and General Mathematics MTG315120.

## Senior Secondary Accreditation Framework






This course will be developed to address the Principles and Standards of the [Senior Secondary Accreditation Framework](#).

### Course Design

This proposal is in line with the draft Integrated Policy Model. From the Articulation, extension and enrichment: section this is a Level 2-3 course pair. Each course is 150 hours and will be divided into three equally weighted modules of 50 hours each.

### Relationship to possible Future Provision

Learning Area Roadmaps are available on the Years 11 & 12 website: <https://11and12.education.tas.gov.au/learning-area-road-maps/>

Focus Area	P	1	2	3	4
 DISCIPLINE-BASED			General Mathematics	Mathematical Methods Specialist Mathematics	
 TRANSDISCIPLINARY			History of Mathematics (with HASS)	Applications of Discrete Maths	
 PROFESSIONAL STUDIES			Data Science (with Technologies)		
 WORK-BASED					
 PERSONAL FUTURES	Mathematics	Essential Mathematics	Essential Mathematics		