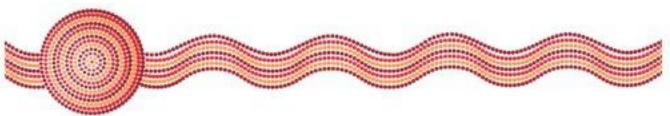
# VCE Foundation Mathematics 2023-2027 Units 3&4

Structure and overview of the study design



## **Acknowledgement of Country**

The VCAA respectfully acknowledges the Traditional Owners of Country throughout Victoria and pays respect to the ongoing living cultures of First Peoples.





#### **VCE Mathematics On-demand Videos**

To support the implementation of the 2023-2027 study design for Mathematics, we have developed a series of short on-demand videos outlining approaches that teachers may wish to utilise in the classroom.

The information presented in these on-demand videos has been developed by current VCE teachers, in conjunction with the VCAA, and offer suggestions for ways schools could approach the implementation of the 2023-2027 VCE Mathematics study design.



#### **General Outline – Foundation Maths**

#### This on demand presentation will briefly discuss

- 1. Purpose and aims
- 2. Areas of Study
- 3. Content and Learning Activities
- 4. Assessment
- 5. Investigations
- 6. Computational thinking
- 7. VCAA Support material and contact



## Topic 1 – Purpose and aims

The course and content encourages students to use their:

- Mathematical knowledge, skills and understanding to solve practical problems that use real contexts linked to a range of workplace, personal, further learning, community and global settings relevant to contemporary society.
- Ability to critically reflect on statistical data and results, and to be able to analyse, communicate and report on any outcomes or findings and to discuss their implications.





## Topic 2 – Areas of Study

#### Areas of study in each of Unit 1 - Unit 4

- Algebra, number and structure
- Data analysis, probability and statistics
- Discrete mathematics
- Space and measurement



## Topic 3 – content and learning activities

#### Content

Data analysis, probability and statistics

#### **Learning activity**

Selecting numerous media articles and noting the variety of presentations and the topics to which they are linked. What similarities or differences are evident.



### Topic 4 – Assessment

In Unit 3&4, a greater weighting is assigned to the School-assessed Coursework than the Examination in a 60:40 split. (p. 11 in 2023-2027 study design)

#### **Foundation Mathematics Assessment**

Unit 3 School-assessed Coursework: 40 per cent (Two investigation tasks)

Unit 4 School-assessed Coursework: 20 per cent (One investigation task)

Units 3 and 4 Examination (2 hours): 40 per cent. (multiple choice and written



## **Topic 5 – Investigations**

There are three components to mathematical investigation:

Formulation: overview of the context or scenario.

**Exploration**: investigation and analysis of the context or scenario.

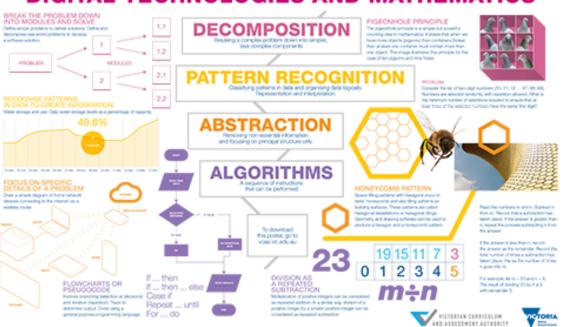
Communication: summary, presentation and interpretation of the findings from the mathematical investigation and related applications.



## 6. Computational Thinking



## - COMPUTATIONAL THINKING - IN THE VICTORIAN CURRICULUM DIGITAL TECHNOLOGIES AND MATHEMATICS



- Decomposition
  - Break down the problem into simpler, less complex components
- Pattern Recognition
  - Classify patterns in data and organizing data logically
  - Representation and interpretation
- Abstraction
  - Removing non essential information and focusing on principal structure only
- Algorithms
  - A sequence of instructions performed
- Link is <u>HERE</u>.



#### Contact

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