



Government of **Western Australia**
School Curriculum and Standards Authority

MATHEMATICS ESSENTIAL

General course

**Year 12 syllabus – What’s changing: Rationale and Aims
For teaching in 2027**

Acknowledgement of Country

Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

Background

As part of the Western Australian Certificate of Education (WACE) Refreshment for reviewing the nomenclature of courses, the Authority has updated the rationale and aims of each syllabus.

The revised rationale and aims are aligned with the mapping of the general capabilities to provide clear connections between the rationale, aims and syllabus content. The rationale outlines what the subject is about and why it is important. It describes what students can expect to study in the course, along with the knowledge, skills and understandings they will develop throughout the course. It also explains how these can be applied in everyday life and references potential future pathways, outlining how students might connect what they learn in the course to further education, training and employment opportunities.

Important information

WACE Refreshment: Reviewing the nomenclature of courses

This document contains information that will be included in the syllabus effective from 1 January 2027.

Users of the syllabus are responsible for checking its currency.

Syllabuses are formally reviewed by the Authority on a cyclical basis, typically every five years.

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Rationale

The Mathematics Essential General course develops students' ability to apply mathematics effectively, efficiently and critically in personal, community and workplace settings. The course integrates mathematical and statistical thinking, helping students develop confidence in solving real-world problems.

The course focuses on enabling students to use mathematics in everyday contexts and make informed decisions in their daily lives. It develops students' practical mathematical skills through measurement, scales and models, interpreting graphs, collecting and analysing data, applying probability and statistics, calculating time zones and travel schedules, and developing financial literacy.

Students develop numeracy, analytical and reasoning skills to solve real-world problems. They gain fluency in calculations, statistical interpretation, financial decision-making and measurement analysis, while refining their ability to clearly communicate mathematical reasoning.

Students apply their mathematical knowledge in practical scenarios, such as managing finances (comparing loan options and calculating compound interest), workplace problem-solving (measurement quantities, materials and costs for building, and scale drawings of house plans), travel and navigation (interpreting time zones, scheduling and distances), and data analysis (reading graphs, making predictions and evaluating trends).

The Mathematics Essential General course provides a foundation for vocational education and training, apprenticeships, traineeships and employment. The numeracy skills developed are valuable in trades, retail, hospitality, administration, community services and any career path where practical mathematics is essential. By strengthening their problem-solving abilities, the course prepares students for further education and career success.

Aims

The Mathematics Essential General course aims to develop students':

- understanding and application of key mathematical and statistical concepts in real-world contexts
- practical problem-solving skills, using mathematical reasoning, estimation and problem-solving techniques, including the effective use of digital tools
- interpretation and analysis of numerical and statistical information to make informed decisions
- ability to communicate mathematical ideas clearly and systematically, using appropriate terminology and representations.