

Year 10 into 11 (2026) Subject Information Booklet

June 2025



Gladstone State High School

General Subjects

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Selection of Subjects

At Gladstone State High School, all students select the equivalent of six subjects of which an English subject and a Mathematics subject are **compulsory**. For some students, it may be a combination of subjects studied at school as well as training undertaken off-campus.

It is important to note that subjects are organised to fit a timetable and subjects will only be timetabled if sufficient numbers allow for it to go ahead. Some subjects also have restricted numbers due to safety regulations, facilities and availability of staff. Although every effort is made to allow students to study their selected subjects, it is important that students and parents be flexible and have alternative subjects listed to avoid disappointment.

It is also important to select subjects that provide appropriate skills for the student to either go on to Tertiary Education, Vocational Courses or enter the workforce. Subject studies at school may be required for University or employment, so selection of appropriate subjects is vital.

Subject Costings

Each year subject offerings are reviewed and as a result some subjects will incur a cost to those undertaking them. Such costs could be:

- Excursions/Camps (including transport)
- Subject activities costs
- Resource costs

At the time of publication of this book, the final additional subject costs are not yet finalised and outlined on each individual subject page.

Senior Education Profile

Students in Queensland are issued with a Senior Education Profile (SEP) upon completion of senior studies. This profile may include a:

- Senior Statement
- Queensland Certificate of Education (QCE)
- Queensland Certificate of Individual Achievement (QCIA).

For more information about the SEP see www.qcaa.qld.edu.au/senior/certificates-and-qualifications/sep.

Senior Statement

The Senior Statement is a transcript of a student's learning account. It shows all QCE-contributing studies and the results achieved that may contribute to the award of a QCE.

If a student has a Senior Statement, then they have satisfied the completion requirements for Year 12 in Queensland.

Queensland Certificate of Education (QCE)

Students may be eligible for a Queensland Certificate of Education (QCE) at the end of their senior schooling. Students who do not meet the QCE requirements can continue to work towards the certificate post-secondary schooling. The QCAA awards a QCE in the following July or December, once a student becomes eligible. Learning accounts are closed after nine years; however, a student may apply to the QCAA to have the account reopened and all credit continued.

There have been changes to the calculation and awarding of a QCE. **One change that is important to note is the duplication of learning.** What this means for students at Gladstone State High School is that whilst some subject and vocational education and training (VET) certificate courses can be studied together, a student will only receive 4 QCE credits or QCE credits related to the highest VET course completed. For example, if a student studied one of these applied subjects and also studied the accompanying VET course they would only receive 4 QCE credits:

Applied Subject	Accompanying VET Course	QCE Credits
Sport and Recreation	SIS20115 Certificate II in Sport and Recreation; SIS20122 Certificate II in Sport and Recreation	4
Tourism	SIT20116 Certificate II in Tourism; SIT20122 Certificate II in Tourism	4
Building and Construction Skills	CPC20220 Certificate II in Construction Pathways	4
Engineering Skills	MEM20422 Certificate II in Engineering Pathways	4
Furnishing Skills	MSF20522 Certificate II in Furniture Making Pathways	4
Hospitality Practices	SIT20316 Certificate II in Hospitality; SIT20322 Certificate II in Hospitality	4
Information and Communication Technology	ICT20120 Certificate II in Applied Digital Technologies	4
Visual Arts in Practice	CUA20720 Certificate II in Visual Arts	4
Business Studies	BSB20120 Certificate II in Workplace Skills	4

Also, if a student studied a Certificate I, then a Certificate II and then a Certificate III of the same training package (e.g. Business or Information Digital Media and Technology) they would only receive credit for the highest certificate that they completed. For example, in Business, a certificate I is worth 2 QCE credits, a certificate II is worth 4 QCE credits and a certificate III is worth 8 QCE credits; therefore, if a student studied all of these qualifications throughout their senior schooling they would only receive the 8 QCE credits for the completion of the certificate III and dependent on new learning.

Queensland Certificate of Individual Achievement (QCIA)

The Queensland Certificate of Individual Achievement (QCIA) reports the learning achievements of eligible students who complete an individual learning program. At the end of the senior phase of learning, eligible students achieve a QCIA. These students have the option of continuing to work towards a QCE post-secondary schooling.

Senior subjects

The QCAA develops five types of senior subject syllabuses — Applied, General, General (Extension), General (Senior External Examination) and Short Course. Results in Applied and General subjects contribute to the award of a QCE and may contribute to an Australian Tertiary Admission Rank (ATAR) calculation, although no more than one result in an Applied subject can be used in the calculation of a student's ATAR.

Typically, it is expected that most students will complete these courses across Years 11 and 12. All subjects build on the P–10 Australian Curriculum.

For more information about specific subjects, schools, students and parents/carers are encouraged to access the relevant senior syllabuses at www.qcaa.qld.edu.au/senior/subjects-from-2024 and, for Senior External Examinations, www.qcaa.qld.edu.au/senior/see

Applied and Applied (Essential) syllabuses

Applied subjects are suited to students who are primarily interested in pathways beyond senior secondary schooling that lead to vocational education and training or work.

General syllabuses

General subjects are suited to students who are interested in pathways beyond senior secondary schooling that lead primarily to tertiary studies and to pathways for vocational education and training and work.

General (Extension) syllabuses

Extension subjects are extensions of the related General subjects and are studied either concurrently with, or after, Units 3 and 4 of the related General course.

Extension courses offer more challenge than the related General courses and build on the studies students have already undertaken in the subject.

Short Course syllabuses

Short Courses are developed to meet a specific curriculum need and are suited to students who are interested in pathways beyond senior secondary schooling that lead to vocational education and training and establish a basis for further education and employment.

Underpinning factors

All senior syllabuses are underpinned by:

- literacy — the set of knowledge and skills about language and texts essential for understanding and conveying content
- numeracy — the knowledge, skills, behaviours and dispositions that students need to use mathematics in a wide range of situations, to recognise and understand the role of mathematics in the world, and to develop the dispositions and capacities to use mathematical knowledge and skills purposefully.

Applied and Applied (Essential) syllabuses

In addition to literacy and numeracy, Applied syllabuses are underpinned by:

- applied learning — the acquisition and application of knowledge, understanding and skills in real-world or lifelike contexts

- community connections — the awareness and understanding of life beyond school through authentic, real-world interactions by connecting classroom experience with the world outside the classroom
- 21st century skills — the attributes and skills students need to prepare them for higher education, work and engagement in a complex and rapidly changing world. These include critical thinking, creative thinking, communication, collaboration and teamwork, personal and social skills, and digital literacy.

General syllabuses and Short Course syllabuses

In addition to literacy and numeracy, General syllabuses and Short Course syllabuses are underpinned by:

- 21st century skills — the attributes and skills students need to prepare them for higher education, work and engagement in a complex and rapidly changing world. These include critical thinking, creative thinking, communication, collaboration and teamwork, personal and social skills, and digital literacy.

QCE eligibility

To receive a QCE, students must achieve 20 credits of learning, at the set standard, in a set pattern, while meeting literacy and numeracy requirements. Contributing courses of study include QCAA-developed subjects or courses, vocational education and training (VET) qualifications and other recognised courses. Typically, students will study six subjects/courses across Years 11 and 12. Many students choose to include vocational education and training (VET) courses in their QCE pathway and some may also wish to extend their learning through university courses or other recognised study. In some cases, students may start VET or other courses in Year 10.

Students can find more information about QCE eligibility requirements, example pathways and how to plan their QCE on the myQCE website at <https://myqce.qcaa.qld.edu.au/your-qce-pathway/planning-your-pathway>.

Australian Tertiary Admission Rank (ATAR) eligibility

The calculation of an Australian Tertiary Admission Rank (ATAR) will be based on a student's:

- best five scaled General subject results or
- best results in a combination of four General subject results plus an Applied subject result or a Certificate III or higher VET qualification.

The Queensland Tertiary Admissions Centre (QTAC) has responsibility for ATAR calculations.

English requirement

Eligibility for an ATAR will require satisfactory completion of a QCAA English subject.

Satisfactory completion will require students to attain a result that is equivalent to a C Level of Achievement in one of five subjects — English, Essential English, Literature, English and Literature Extension or English as an Additional Language.

While students must meet this standard to be eligible to receive an ATAR, it is not mandatory for a student's English result to be included in the calculation of their ATAR.

General syllabuses

Course overview

General syllabuses are developmental four-unit courses of study.

Units 1 and 2 provide foundational learning, allowing students to experience all syllabus objectives and begin engaging with the course subject matter. It is intended that Units 1 and 2 are studied as a pair. Assessment in Units 1 and 2 provides students with feedback on their progress in a course of study and contributes to the award of a QCE.

Students should complete Units 1 and 2 before starting Units 3 and 4.

Units 3 and 4 consolidate student learning. Assessment in Units 3 and 4 is summative and student results contribute to the award of a QCE and to ATAR calculations.

Assessment

Units 1 and 2 assessments

Schools decide the sequence, scope and scale of assessments for Units 1 and 2. These assessments should reflect the local context. Teachers determine the assessment program, tasks and marking guides that are used to assess student performance for Units 1 and 2.

Units 1 and 2 assessment outcomes provide feedback to students on their progress in the course of study. Schools should develop at least *two* but no more than *four* assessments for Units 1 and 2. At least *one* assessment must be completed for *each* unit.

Schools report satisfactory completion of Units 1 and 2 to the QCAA, and may choose to report levels of achievement to students and parents/carers using grades, descriptive statements or other indicators.

Units 3 and 4 assessments

Students complete a total of *four* summative assessments — three internal and one external — that count towards the overall subject result in each General subject.

Schools develop *three* internal assessments for each senior subject to reflect the requirements described in Units 3 and 4 of each General syllabus.

The three summative internal assessments need to be endorsed by the QCAA before they are used in schools. Students' results in these assessments are externally confirmed by QCAA assessors. These confirmed results from internal assessment are combined with a single result from an external assessment, which is developed and marked by the QCAA. The external assessment result for a subject contributes to a determined percentage of a students' overall subject result. For most subjects this is 25%; for Mathematics and Science subjects it is 50%.

Instrument-specific marking guides

Each syllabus provides instrument-specific marking guides (ISMGs) for summative internal assessments.

The ISMGs describe the characteristics evident in student responses and align with the identified assessment objectives. Assessment objectives are drawn from the unit objectives and are contextualised for the requirements of the assessment instrument.

Schools cannot change or modify an ISMG for use with summative internal assessment.

As part of quality teaching and learning, schools should discuss ISMGs with students to help them understand the requirements of an assessment task.

External assessment

External assessment is summative and adds valuable evidence of achievement to a student's profile. External assessment is:

- common to all schools
- administered under the same conditions at the same time and on the same day
- developed and marked by the QCAA according to a commonly applied marking scheme.

The external assessment contributes a determined percentage (see specific subject guides — assessment) to the student's overall subject result and is not privileged over summative internal assessment.

General (Extension) syllabuses

Course overview

Extension subjects are extensions of the related General subjects and include external assessment. Extension subjects are studied either concurrently with, or after, Units 3 and 4 of the General course of study.

Extension syllabuses are courses of study that consist of two units (Units 3 and 4).

Subject matter, learning experiences and assessment increase in complexity across the two units as students develop greater independence as learners.

The results from Units 3 and 4 contribute to the award of a QCE and to ATAR calculations.

Note: In the case of Music Extension, this subject has three syllabuses, one for each of the specialisations — Composition, Musicology and Performance.

Assessment

Units 3 and 4 assessments

Students complete a total of *four* summative assessments — three internal and one external — that count towards the overall subject result in each General (Extension) subject.

Schools develop *three* internal assessments for each senior subject to reflect the requirements described in Units 3 and 4 of each General syllabus.

The three summative internal assessments need to be endorsed by the QCAA before they are used in schools. Students' results in these assessments are externally confirmed by QCAA assessors. These confirmed results from internal assessment are combined with a single result from an external assessment, which is developed and marked by the QCAA. The external assessment result for a subject contributes to a determined percentage of a students' overall subject result. For most subjects this is 25%; for Mathematics and Science subjects it is 50%.

Short Course syllabuses

Course overview

Short Courses are one-unit courses of study. A Short Course syllabus includes topics and subtopics. Results contribute to the award of a QCE. Results do not contribute to ATAR calculations.

Short Courses are available in:

- Aboriginal & Torres Strait Islander Languages
- Career Education
- Literacy
- Numeracy.

Assessment

Short Course syllabuses use two summative school-developed assessments to determine a student's exit result. Schools develop these assessments based on the learning described in the syllabus. Short Courses do not use external assessment.

Short Course syllabuses provide instrument-specific standards for the two summative internal assessments. The instrument-specific standards describe the characteristics evident in student responses and align with the identified assessment objectives. Assessment objectives are drawn from the topic objectives and are contextualised for the requirements of the assessment instrument.

POLICIES AND PROCEDURES OF MINIMUM PREREQUISITE

Background

Students, when choosing a course of study for the Senior Phase of schooling, are expected to make a wise and considered decision. The choices they make are informed by their past academic performance, personal interest, prerequisites and standards for senior subjects and the requirements for their intended future pathway. Most students make appropriate choices according to these prerequisites and their ability, based on past academic performance, personal interest and intended pathway. Some students however, against all reasonable advice, information about past academic performance and required prerequisite subjects and standards, make inappropriate decisions. Some students also continue to remain in subjects when their academic performance is consistently below an acceptable standard and will not enable the student to successfully pursue any pathway or achieve a Queensland Certificate of Education (QCE).

Purpose

The purpose of this policy and set of procedures is to ensure that students make appropriate decisions regarding a course of study in the Senior Phase of Learning. It is also to ensure students maintain a reasonable standard of academic performance throughout the Senior Phase of Learning, which will effectively contribute to the student being able to attain their chosen future pathway and Queensland Certificate of Education (QCE).

Policy

Students wishing to enter senior subjects must complete the required prerequisite subjects and attain the minimum standards for their chosen senior subjects. If a student fails to meet the minimum standard, both the student and parent will have to sign a minimum standard contract for each subject that is chosen where minimum standard is not met. Throughout unit 1, the student's academic progress in the subject will be reviewed to determine if they are achieving the required academic standard as outlined in the contract. If these requirements are not met, the students will be advised to select an alternative subject. All students must also maintain a reasonable standard of academic performance throughout the Senior Phase of Learning, which will effectively contribute to the student being able to attain their chosen pathway and achieve a Queensland Certificate of Education (QCE).

Procedure

- While in Year 10, all students will participate in a Subject Selection Program that will provide support for them to make an informed choice regarding their course of study in the Senior Phase of Learning.
- Required prerequisite subjects and standards will be indicated in the Senior Subject Information Book.
- Parents will be informed about the existence of this policy at subject selection evenings and in correspondence related to subject selection.
- Completion and attainment of the prerequisite subjects and standards will be checked at the subject selection interviews and again at the end of year 10 and students will be advised, if choices are inappropriate, that they should find an alternative subject to study. Where students do not accept this advice and make an inappropriate choice based on the information that is available, the advice will be recorded and a subject specific learning contract must be signed by all parties (parent, student, teacher) and filed with the student's enrolment form. This contract is designed to highlight to the student and parent what the subject requires the student to do in order to be successfully as a result of not meeting the minimum standard at the end of year 10.
- Where students insist that they be able to enter a subject even though they do not have the prerequisite subject and/or minimum standard, they must understand that their academic progress will be reviewed during unit 1 to determine if they are fulfilling the subject minimum standard contract. The learning contract is a source of support for the student and should they fail to follow this support and not comply with the subject expectations, the student and parent will have a meeting regarding a change of subject.
- When the school is putting together the Timetable 'Subject' lines and decisions are being made to offer subjects, the school will take into consideration a student's previous academic performance if it is necessary to select from a list of students who are all wishing to enrol in the same course of study, and there are too many students for the number of classes on offer.

- During unit 1, Heads of Department will review students' academic performance and review any student on minimum standard contracts. They will make contact with the students and parents about the continuation in that subject and make a student specific learning plan, as well as, informing the Principal, Deputy Principals or Head of School - Senior, about students underperforming in the subject and the measures that are in place for the student to be successful and whether a subject change is required.
- Reasonable academic performance or reasonable standard is defined as achieving a C grade achievement or above. In some circumstances Heads of Department may deem that students, achieving at the top end of the limited band, be given additional time to achieve a C level of achievement.
- Where a student does not meet a reasonable academic standard, they will be supported by advice from the Guidance Officer as to which is an appropriate alternative subject and/or alternative future pathway.

RECOMMENDATIONS FOR SENIOR SUBJECTS

To study general subjects in year 11 and 12 at Gladstone State High School, it is highly recommended that subject selections are based on the information presented below.

If I wish to study these subjects in Year 11 and 12 ...	Physics	Biology, Engineering, Chemistry
... then it is highly recommended that I enrol in these subjects	Mathematical Methods	General Maths (minimum)

The following is additional subject specific recommendations for enrolling into year 11 and 12 general subjects.

General Subject		
Biology	A or B in Biology Unit in Science for Semester 1. C in English.	A or B in General Science for Semester 2. C in English
Chemistry	A or B in Chemistry Unit in Science for Semester 1. C in English.	A or B in General Science for Semester 2. C in English
Physics	A or B in Physics Unit in Science for Semester 1. C in English.	A or B in General Science for Semester 2. C in year 10 Extension Maths or a B in year 10 Core Maths. C in English
Psychology	A or B in Biology Unit in Science for Semester 1. C in English.	Overall grade of A or B in General Science for Semester 2. C in English for Semester 2
Engineering	C or higher in Physics Unit in Science for Semester 1 C in English.	C in year 10 Extension Maths or B in year 10 Core Maths. C in English
General Mathematics	B in Year 10 Mathematics; C in Year 10 Maths Extension	
Mathematical Methods	B in Year 10 Mathematics Extension	
Specialist Mathematics	Must be enrolled in Mathematical Methods B in Year 10 Mathematics Extension	
English	B in English	
Ancient History	C in English; C in Year 10 History	
Business	C in English	
Geography	C in English; C in Year 10 Maths	
Legal Studies	C in English	
Modern History	C in English; C in Year 10 History	
Japanese	C in Year 10 Japanese	
Design	C in Year 10 Design is recommended	
Food and Nutrition	C in a Year 10 English is recommended	
Marine Science	C in English; A or B in Biology unit in Science and/or A or B in Marine Studies year 10 elective	
Physical Education	C in English; A or B in year 10 Health and Physical Education Or C in year 10 PEN (elective)	
Certificate III Fitness	A or B in year 10 Health and Physical Education Or C in year 10 PEN (elective)	
Music	C in Year 10 English; Student should be able to read and write music and play an instrument (including voice).	It is beneficial to be engaged in current or previous school IM or private lessons on chosen instrument.
Music Extension - Yr 12 only(Performance)	Must study Music in year 11 and 12	Beneficial to have reached 5th Grade AMEB (or equivalent) performance
Visual Art	C in Year 10 English	
Drama	C in Year 10 English	

Accounting is a universal discipline, encompassing the successful management of financial resources of the public sector, businesses, and individuals. It is foundational to all organisations across all industries and assists in discharging accountability and financial control. Accounting is a way of systematically organising, critically analysing and communicating financial data and information for decision-making. The overarching context for this syllabus is the real-world expectation that accounting involves processing transactions to develop financial statements and reports to stakeholders. Digital technologies are integral to accounting, enabling real-time access to vital financial information.

When students study this subject, they develop an understanding of the essential role accounting plays in the successful performance of any organisation. Students learn fundamental accounting concepts in order to develop an understanding of accrual accounting, accounting for GST, managerial and accounting controls, internal and external financial statements, and analysis. Students are then ready for more complex utilisation of knowledge, allowing them to synthesise data and other financial information, evaluate practices of financial management, solve authentic accounting problems and make and communicate recommendations.

Accounting is for students with a special interest in business, commerce, entrepreneurship and the personal

management of financial resources. The numerical, literacy, technical, financial, critical thinking, decision-making and problem-solving skills learned in Accounting enrich the personal and working lives of students. Problem-solving and the use of authentic and diversified accounting contexts provide opportunity for students to develop an understanding of the ethical attitudes and values required to participate more effectively and responsibly in a changing business environment.

Pathways

A course of study in Accounting can establish a basis for further education and employment in the fields of accounting, business, management, banking, finance, law, economics and commerce.

Objectives

By the conclusion of the course of study, students will:

- comprehend accounting concepts, principles and processes
- synthesise accounting principles and processes
- analyse and interpret financial data and information
- evaluate practices of financial management to make decisions and propose recommendations
- create responses that communicate meaning.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Real-world accounting <ul style="list-style-type: none"> • Introduction to accounting • Accounting for today's businesses 	Financial reporting <ul style="list-style-type: none"> • End-of-period reporting for today's businesses • Performance analysis of a sole trader business 	Managing resources <ul style="list-style-type: none"> • Cash management • Managing resources for a sole trader business 	Accounting — the big picture <ul style="list-style-type: none"> • Fully classified financial statement reporting and analysis for a sole trader business • Complete accounting process for a sole trader business • Performance analysis of a public company

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Project — cash management	25%	Summative internal assessment 3 (IA3): • Examination — combination response	25%
Summative internal assessment 2 (IA2): • Examination — combination response	25%	Summative external assessment (EA): • Examination — combination response	25%

Ancient History is concerned with studying people, societies and civilisations of the Ancient World, from the development of the earliest human communities to the end of the Middle Ages. Students explore the interaction of societies and the impact of individuals and groups on ancient events and ways of life, enriching their appreciation of humanity and the relevance of the ancient past. Ancient History illustrates the development of some of the distinctive features of modern society which shape our identity, such as social organisation, systems of law, governance and religion. Ancient History highlights how the world has changed, as well as the significant legacies that continue into the present. This insight gives context for the interconnectedness of past and present across a diverse range of societies. Ancient History aims to have students think historically and form a historical consciousness. A study of the past is invaluable in providing students with opportunities to explore their fascination with, and curiosity about, stories of the past and the mysteries of human behaviour.

Throughout the course of study, students develop an understanding of historical issues and problems by interrogating the surviving evidence of ancient sites, societies, individuals, events and significant historical periods. Students investigate the problematic nature of evidence, pose increasingly complex questions about the past and develop an understanding of different and sometimes conflicting perspectives on the past. A historical inquiry process is integral to the study of Ancient History. Students use the skills of historical inquiry to investigate the past. They devise historical questions and conduct research, analyse historical sources and evaluate and synthesise evidence from sources to formulate justified historical arguments. Historical skills form the learning and subject matter provides the context. Learning in

context enables the integration of historical concepts and understandings into four units of study: Investigating the Ancient World, Personalities in their times, Reconstructing the Ancient World, and People, power and authority.

A course of study in Ancient History empowers students with multi-disciplinary skills in analysing and evaluating textual and visual sources, constructing arguments, challenging assumptions, and thinking both creatively and critically. Ancient History students become knowledge creators, productive and discerning users of technology, and empathetic, open-minded global citizens.

Pathways

A course of study in Ancient History can establish a basis for further education and employment in the fields of archaeology, history, education, psychology, sociology, law, business, economics, politics, journalism, the media, health and social sciences, writing, academia and research.

Objectives

By the conclusion of the course of study, students will:

- devise historical questions and conduct research
- comprehend terms, concepts and issues
- analyse evidence from historical sources
- evaluate evidence from historical sources
- synthesise evidence from historical sources
- communicate to suit purpose

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Investigating the Ancient World <ul style="list-style-type: none"> • Digging up the past • Features of ancient societies 	Personalities in their time <ul style="list-style-type: none"> • Personality from the Ancient World 1 • Personality from the Ancient World 2 	Reconstructing the Ancient World <p>Schools select two of the following historical periods to study in this unit:</p> <ul style="list-style-type: none"> • Thebes — East and West, from the 18th to the 20th Dynasty • The Bronze Age Aegean • Assyria from Tiglath Pileser III to the fall of the Empire • The Ancient Levant — First and Second Temple Period • Persia from Cyrus II to Darius III • Fifth Century Athens (BCE) • Macedonian Empire from Philip II to Alexander III • Rome during the Republic • Early Imperial Rome from Augustus to Nero • Pompeii and Herculaneum • Later Han Dynasty and the Three Kingdoms • The Celts and/or Roman Britain • The Medieval Crusades • Classical Japan until the end of the Heian Period 	People, power and authority <p>Schools select one of the following historical periods to study in this unit:</p> <ul style="list-style-type: none"> • Ancient Egypt — New Kingdom Imperialism • Ancient Greece — the Persian Wars • Ancient Greece — the Peloponnesian War • Ancient Carthage and/or Rome — the Punic Wars • Ancient Rome — Civil War and the breakdown of the Republic • Ancient Rome — the Augustan Age • Ancient Rome — Imperial Rome until the fall of the Western Roman Empire • Ancient Rome — the Byzantine Empire <p>Schools select one of the personality options that has been nominated by the QCAA for the external assessment. Schools will be notified of the options at least two years before the external assessment is implemented.</p>

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Examination — extended response	25%	Summative internal assessment 3 (IA3): • Investigation	25%
Summative internal assessment 2 (IA2): • Investigation	25%	Summative external assessment (EA): • Examination — short responses	25%

Biology

General senior subject

General

Biology provides opportunities for students to engage with living systems. In Unit 1, students develop their understanding of cells and multicellular organisms. In Unit 2, they engage with the concept of maintaining the internal environment. In Unit 3, students study biodiversity and the interconnectedness of life. This knowledge is linked in Unit 4 with the concepts of heredity and the continuity of life.

Students will learn valuable skills required for the scientific investigation of questions. In addition, they will become citizens who are better informed about the world around them and who have the critical skills to evaluate and make evidence-based decisions about current scientific issues.

Biology aims to develop students':

- sense of wonder and curiosity about life
- respect for all living things and the environment
- understanding of how biological systems interact and are interrelated, the flow of matter and energy through and between these systems, and the processes by which they persist and change
- understanding of major biological concepts, theories and models related to biological systems at all scales, from subcellular processes to ecosystem dynamics
- appreciation of how biological knowledge has developed over time and continues to develop; how scientists use biology in a wide range of applications; and how biological knowledge influences society in local, regional and global contexts
- ability to plan and carry out fieldwork, laboratory and other research investigations, including the collection and analysis of qualitative and quantitative data and the interpretation of evidence
- ability to use sound, evidence-based arguments creatively and analytically when evaluating claims and applying biological knowledge
- ability to communicate biological understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

Pathways

A course of study in Biology can establish a basis for further education and employment in the fields of medicine, forensics, veterinary, food and marine sciences, agriculture, biotechnology, environmental rehabilitation, biosecurity, quarantine, conservation and sustainability.

Objectives

By the conclusion of the course of study, students will:

- describe ideas and findings
- apply understanding
- analyse data
- interpret evidence
- evaluate conclusions, claims and processes
- investigate phenomena.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Cells and multicellular organisms <ul style="list-style-type: none"> Cells as the basis of life Exchange of nutrients and wastes Cellular energy, gas exchange and plant physiology 	Maintaining the internal environment <ul style="list-style-type: none"> Homeostasis — thermoregulation and osmoregulation Infectious disease and epidemiology 	Biodiversity and the interconnectedness of life <ul style="list-style-type: none"> Describing biodiversity and populations Functioning ecosystems and succession 	Heredity and continuity of life <ul style="list-style-type: none"> Genetics and heredity Continuity of life on Earth

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): <ul style="list-style-type: none">• Data test	10%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• Research investigation	20%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none">• Student experiment	20%		
Summative external assessment (EA): 50% <ul style="list-style-type: none">• Examination — combination response			

Business is multifaceted. It is a contemporary discipline with representation in every aspect of society including individuals, community and government. Business, as a dynamic and evolving discipline, is responsive to environmental changes such as emerging technologies, globalisation, sustainability, resources, economy and society.

The study of business is relevant to all individuals in a rapidly changing, technology-focused and innovation-driven world. Through studying Business, students are challenged academically and exposed to authentic practices. The knowledge and skills developed in Business will allow students to contribute meaningfully to society, the workforce and the marketplace and prepare them as potential employees, employers, leaders, managers and entrepreneurs of the future.

Students investigate the business life cycle from the seed to post-maturity stage and develop skills in examining business data and information. Students learn business concepts, theories and strategies relevant to leadership, management and entrepreneurship. A range of business environments and situations is explored. Through this exploration, students investigate the influence of and implications for strategic development in the functional areas of finance, human resources, marketing and operations.

Learning in Business integrates an inquiry approach with authentic case studies. Students become critical observers of business practices by applying an inquiry process in undertaking investigations of business situations. They use a variety of technological, communication and analytical tools to comprehend, analyse and interpret business data and information. Students evaluate strategies using business criteria that are flexible, adaptable and underpinned by communication, leadership, creativity and sophistication of thought.

This multifaceted course creates a learning environment that fosters ambition and success, while being mindful of social and ethical values and responsibilities. Opportunity is provided to develop interpersonal and leadership skills through a range of individual and collaborative activities in teaching and learning. Business develops students' confidence and capacity to participate as members or leaders of the global workforce through the integration of 21st century skills.

Business allows students to engage with the dynamic business world (in both national and global contexts), the changing workforce and emerging digital technologies. It addresses contemporary implications, giving students a competitive edge in the workplace as socially responsible and ethical members of the business community, and as informed citizens, employees, consumers and investors.

Pathways

A course of study in Business can establish a basis for further education and employment in the fields of business management, business development, entrepreneurship, business analytics, economics, business law, accounting and finance, international business, marketing, human resources management and business information systems.

Objectives

By the conclusion of the course of study, students will:

- describe business situations and environments
- explain business concepts and strategies
- analyse and interpret business situations
- evaluate business strategies
- create responses that communicate meaning to suit audience, context and purpose.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Business creation <ul style="list-style-type: none"> Fundamentals of business Creation of business ideas 	Business growth <ul style="list-style-type: none"> Establishment of a business Entering markets 	Business diversification <ul style="list-style-type: none"> Competitive markets Strategic development 	Business evolution <ul style="list-style-type: none"> Repositioning a business Transformation of a business

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1):	25%	Summative internal assessment 3 (IA3):	25%
<ul style="list-style-type: none"> Examination — combination response 		<ul style="list-style-type: none"> Feasibility report 	
Summative internal assessment 2 (IA2):	25%	Summative external assessment (EA):	25%
<ul style="list-style-type: none"> Business report 		<ul style="list-style-type: none"> Examination — combination response 	

Chemistry is the study of materials and their properties and structure. In Unit 1, students study atomic theory, chemical bonding, and the structure and properties of elements and compounds. In Unit 2, students explore intermolecular forces, gases, aqueous solutions, acidity and rates of reaction. In Unit 3, students study equilibrium processes and redox reactions. In Unit 4, students explore organic chemistry, synthesis and design to examine the characteristic chemical properties and chemical reactions displayed by different classes of organic compounds.

Chemistry aims to develop students':

- interest in and appreciation of chemistry and its usefulness in helping to explain phenomena and solve problems encountered in their ever-changing world
- understanding of the theories and models used to describe, explain and make predictions about chemical systems, structures and properties
- understanding of the factors that affect chemical systems and how chemical systems can be controlled to produce desired products
- appreciation of chemistry as an experimental science that has developed through independent and collaborative research, and that has significant impacts on society and implications for decision-making
- expertise in conducting a range of scientific investigations, including the collection and analysis of qualitative and quantitative data, and the interpretation of evidence
- ability to critically evaluate and debate scientific arguments and claims in order to solve problems and generate informed, responsible and ethical conclusions
- ability to communicate chemical understanding and findings to a range of audiences, including through the use of appropriate representations, language and nomenclature.

Pathways

A course of study in Chemistry can establish a basis for further education and employment in the fields of forensic science, environmental science, engineering, medicine, pharmacy and sports science.

Objectives

By the conclusion of the course of study, students will:

- describe ideas and findings
- apply understanding
- analyse data
- interpret evidence
- evaluate conclusions, claims and processes
- investigate phenomena.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Chemical fundamentals — structure, properties and reactions <ul style="list-style-type: none"> • Properties and structure of atoms • Properties and structure of materials • Chemical reactions — reactants, products and energy change 	Molecular interactions and reactions <ul style="list-style-type: none"> • Intermolecular forces and gases • Aqueous solutions and acidity • Rates of chemical reactions 	Equilibrium, acids and redox reactions <ul style="list-style-type: none"> • Chemical equilibrium systems • Oxidation and reduction 	Structure, synthesis and design <ul style="list-style-type: none"> • Properties and structure of organic materials • Chemical synthesis and design

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Data test	10%	Summative internal assessment 3 (IA3): • Research investigation	20%
Summative internal assessment 2 (IA2): • Student experiment	20%		
Summative external assessment (EA): 50% • Examination — combination response			

Design

General senior subject

General

The Design subject focuses on the application of design thinking to envisage creative products, services and environments. Designing is a complex and sophisticated form of problem-solving that uses divergent and convergent thinking approaches that can be practised and improved. Designers are separated from the constraints of production processes to allow them to appreciate and exploit innovative ideas.

In Unit 1, students will learn about and experience designing in the context of stakeholder-centred design. They will be introduced to the range and importance of stakeholders and how the design process is used to respond to their needs and wants. In Unit 2, students will learn about and experience designing in the context of commercial design, considering the role of the client and the influence of economic, social and cultural issues. They will use a collaborative design approach. In Unit 3, students will learn about and experience designing in the context of human-centred design. They will use designing with empathy as an approach as they respond to the needs and wants of a particular person. In Unit 4, students will learn about and experience designing in the context of sustainable design. They will explore design opportunities and design to improve economic, social and ecological sustainability.

The teaching and learning approach uses a design process grounded in the problem-based learning framework. This approach enables students to learn about and experience design through exploring needs, wants and opportunities; developing ideas and design concepts; using sketching and low-fidelity prototyping skills; and evaluating ideas. Students communicate design proposals to suit different audiences.

Students will learn how design has influenced the economic, social and cultural

environment in which they live. They will understand the agency of humans in conceiving and imagining possible futures through design. Students will develop valuable 21st century skills in critical thinking, creative thinking, communication, collaboration and teamwork, personal and social skills, and information & communication technologies (ICT) skills. Collaboration, teamwork and communication are crucial skills needed to work in design teams and liaise with stakeholders. The design thinking students learn is broadly applicable to a range of professions and supports the development of critical and creative thinking.

Students will develop an appreciation of designers and their role in society. They will learn the value of creativity and build resilience as they experience iterative design processes, where the best ideas may be the result of trial and error and a willingness to take risks and experiment with alternatives. Design equips students with highly transferrable, future-focused thinking skills relevant to a global context.

Pathways

A course of study in Design can establish a basis for further education and employment in the fields of architecture, digital media design, fashion design, graphic design, industrial design, interior design and landscape architecture.

Objectives

By the conclusion of the course of study, students will:

- describe design problems and design criteria
- represent ideas, design concepts and design information using visual representation skills
- analyse needs, wants and opportunities using data
- devise ideas in response to design problems
- evaluate ideas to make refinements
- propose design concepts in response to design problems
- make decisions about and use mode-appropriate features, language and conventions for particular purposes and contexts.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Stakeholder-centred design <ul style="list-style-type: none">• Designing for others	Commercial design influences <ul style="list-style-type: none">• Responding to needs and wants	Human-centred design <ul style="list-style-type: none">• Designing with empathy	Sustainable design influences <ul style="list-style-type: none">• Responding to opportunities

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): <ul style="list-style-type: none">• Design challenge	20%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• Project	25%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none">• Project	30%	Summative external assessment (EA): <ul style="list-style-type: none">• Examination — extended response	25%

Drama

General senior subject

General

Drama interrogates the human experience by investigating, communicating and embodying stories, experiences, emotions and ideas that reflect the human experience. It allows students to look to the past with curiosity, and explore inherited traditions of artistry to inform their own artistic practice and shape their world as global citizens. Drama is created and performed in diverse spaces, including formal and informal theatre spaces, to achieve a wide range of purposes. Drama engages students in imaginative meaning-making processes and involves them using a range of artistic skills as they make and respond to dramatic works. The range of purposes, contexts and audiences provides students with opportunities to experience, reflect on, understand, communicate, collaborate and appreciate different perspectives of themselves, others and the world in which they live.

Across the course of study, students will develop a range of interrelated skills of drama that will complement the knowledge and processes needed to create dramatic action and meaning. They will learn about the dramatic languages and how these contribute to the creation, interpretation and critique of dramatic action and meaning for a range of purposes. A study of a range of forms and styles in a variety of inherited traditions, current practice and emerging trends, including those from different cultures and contexts, forms a core aspect of the learning. Drama provides opportunities for students to learn how to engage with dramatic works as both artists and audience through the use of critical literacies.

In Drama, students engage in aesthetic learning experiences that develop the 21st century skills of critical thinking, creative thinking, communication, collaboration and teamwork, personal and social skills, and digital literacy. They learn how to reflect on

their artistic, intellectual, emotional and kinaesthetic understanding as creative and critical thinkers and curious artists.

Additionally, students will develop personal confidence, skills of inquiry and social skills as they work collaboratively with others.

Drama engages students in the making of and responding to dramatic works to help them realise their creative potential as individuals. Learning in Drama promotes a deeper and more empathetic understanding and appreciation of others and communities. Innovation and creative thinking are at the forefront of this subject, which contributes to equipping students with highly transferable skills that encourage them to imagine future perspectives and possibilities.

Pathways

A course of study in Drama can establish a basis for further education and employment in the field of drama, and to broader areas in creative industries, cultural institutions, administration and management, law, communications, education, public relations, research, science and technology. The understanding and skills built in Drama connect strongly with careers in which it is important to understand different social and cultural perspectives in a range of contexts, and to communicate meaning in functional and imaginative ways.

Objectives

By the conclusion of the course of study, students will:

- demonstrate skills of drama
- apply literacy skills
- interpret purpose, context and text
- manipulate dramatic languages
- analyse dramatic languages
- evaluate dramatic languages.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Share How does drama promote shared understandings of the human experience?	Reflect How is drama shaped to reflect lived experience?	Challenge How can we use drama to challenge our understanding of humanity?	Transform How can you transform dramatic practice?

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Performance	20%	Summative internal assessment 3 (IA3): • Practice-led project	35%
Summative internal assessment 2 (IA2): • Dramatic concept	20%		
Summative external assessment (EA): 25% • Examination — extended response			

Engineering includes the study of mechanics, materials science and control technologies through real-world engineering contexts where students engage in problem-based learning. Students learn to explore complex, open-ended problems and develop engineered solutions. They recognise and describe engineering problems, determine solution success criteria, develop and communicate ideas and predict, generate, evaluate and refine real-world-related solutions. Students justify their decision-making and acknowledge the societal, economic and environmental sustainability of their engineered solutions. The problem-based learning framework in Engineering encourages students to become self-directed learners and develop beneficial collaboration and management skills.

Engineering provides students with an opportunity to experience, first-hand and in a practical way, the exciting and dynamic work of real-world engineers. Students learn transferrable 21st century skills that support their life aspirations, including critical thinking, creative thinking, communication, collaboration and teamwork, personal and social skills, and information & communication technologies (ICT) skills. The study of Engineering inspires students to become adaptable and resilient. They appreciate the engineer's ability to confidently and purposefully generate solutions that improve the quality of people's lives in an increasingly complex and dynamic technological world.

Pathways

A course of study in Engineering can establish a basis for further education and employment in the field of engineering, including, but not limited to, civil, mechanical, mechatronic, electrical, aerospace, mining, process, chemical, marine, biomedical, telecommunications,

environmental, micro-nano and systems. The study of engineering will also benefit students wishing to pursue post-school tertiary pathways that lead to careers in architecture, project management, aviation, surveying and spatial sciences.

Objectives

By the conclusion of the course of study, students will:

- recognise and describe engineering problems, concepts and principles
- symbolise and explain ideas and solutions
- analyse problems and information
- determine solution success criteria for engineering problems
- synthesise information and ideas to predict possible solutions
- generate prototype solutions to provide data to assess the accuracy of predictions
- evaluate and refine ideas and solutions to make justified recommendations
- make decisions about and use mode-appropriate features, language and conventions for particular purposes and contexts.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Engineering fundamentals <ul style="list-style-type: none"> • Engineering in society • Engineering communication • Introduction to engineering mechanics • Introduction to engineering materials 	Emerging technologies <ul style="list-style-type: none"> • Emerging needs in society • Emerging processes, machinery and automation • Emerging materials 	Civil structures <ul style="list-style-type: none"> • Civil structures in society • Civil structures and forces • Civil engineering materials 	Machines and mechanisms <ul style="list-style-type: none"> • Machines in society • Machines, mechanisms and control • Materials

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1):	25%	Summative internal assessment 3 (IA3):	25%
<ul style="list-style-type: none"> • Engineered solution – 2000 words up to 10 A4 pages 		<ul style="list-style-type: none"> • Engineered solution- 2000 words up to 10 A4 pages 	
Summative internal assessment 2 (IA2):	25%	Summative external assessment (EA):	25%
<ul style="list-style-type: none"> • Examination — combination response 		<ul style="list-style-type: none"> • Examination — combination response 	

Technologies are an integral part of society as humans seek to create solutions to improve their own and others' quality of life. Technologies affect people and societies by transforming, restoring and sustaining the world in which we live. In an increasingly technological and complex world, it is important to develop the knowledge, understanding and skills associated with traditional and contemporary tools and materials used by the Australian manufacturing industry to produce products. The manufacturing industry transform raw materials into products wanted by society. This adds value for both enterprises and consumers. Australia has strong manufacturing industries that continue to provide employment opportunities.

Engineering Skills includes the study of the manufacturing and engineering industry's practices and production processes through students' application in, and through trade learning contexts. Industry practices are used by manufacturing enterprises to manage the manufacture of products from raw materials. Production processes combine the production skills and procedures required to produce products. Students engage in applied learning to demonstrate knowledge and skills in units that meet local needs, available resources and teacher expertise. Through both individual and collaborative learning experiences, students learn to meet customer expectations of product quality at a specific price and time.

Applied learning supports students' development of transferable 21st century, literacy and numeracy skills relevant to future employment opportunities in the structural, transport and manufacturing engineering industrial sectors. Students learn to interpret drawings and technical information, and select and demonstrate safe practical production processes using

hand and power tools, machinery and equipment. They communicate using oral, written and graphical modes, organise, calculate, plan, evaluate and adapt production processes and the products they produce. The majority of learning is done through manufacturing tasks that relate to business and industry. Students work with each other to solve problems and complete practical work.

Pathways

A course of study in Engineering Skills can establish a basis for further education and employment in engineering trades. With additional training and experience, potential employment opportunities may be found, for example, as a sheet metal worker, metal fabricator, welder, maintenance fitter, metal machinist, locksmith, air-conditioning mechanic, refrigeration mechanic or automotive mechanic.

Objectives

By the conclusion of the course of study, students should:

- demonstrate practices, skills and procedures
- interpret drawings and technical information
- select practices, skills and procedures
- sequence processes
- evaluate skills and procedures, and structures
- adapt plans, skills and procedures.

Structure

Engineering Skills is a four-unit course of study. This syllabus contains six QCAA-developed units as options for schools to select from to develop their course of study.

Unit option	Unit title
Unit option A	Fitting and machining
Unit option B	Welding and fabrication
Unit option C	Sheet metal working
Unit option D	Production in the structural engineering industry
Unit option E	Production in the transport engineering industry
Unit option F	Production in the manufacturing engineering industry

Assessment

Students complete two assessment tasks for each unit. The assessment techniques used in Engineering Skills are:

Technique	Description	Response requirements
Practical demonstration	Students perform a practical demonstration when manufacturing a unit context artefact and reflect on industry practices, and production skills and procedures.	Practical demonstration Practical demonstration: the skills and procedures used in 3–5 production processes Documentation Multimodal (at least two modes delivered at the same time): up to 3 minutes, 6 A4 pages, or equivalent digital media
Project	Students manufacture a unit context product that consists of multiple interconnected components and document the manufacturing process.	Product Product: 1 unit-specific product manufactured using the skills and procedures in 5–7 production processes Manufacturing process Multimodal (at least two modes delivered at the same time): up to 5 minutes, 8 A4 pages, or equivalent digital media

The subject English focuses on the study of both literary texts and non-literary texts, developing students as independent, innovative and creative learners and thinkers who appreciate the aesthetic use of language, analyse perspectives and evidence, and challenge ideas and interpretations through the analysis and creation of varied texts.

Students have opportunities to engage with language and texts through a range of teaching and learning experiences to foster:

- skills to communicate effectively in Standard Australian English for the purposes of responding to and creating literary and non-literary texts
- skills to make choices about generic structures, language, textual features and technologies for participating actively in literary analysis and the creation of texts in a range of modes, mediums and forms, for a variety of purposes and audiences
- enjoyment and appreciation of literary and non-literary texts, the aesthetic use of language, and style
- creative thinking and imagination, by exploring how literary and non-literary texts shape perceptions of the world and enable us to enter the worlds of others
- critical exploration of ways in which literary and non-literary texts may reflect or challenge social and cultural ways of thinking and influence audiences
- empathy for others and appreciation of different perspectives through studying a range of literary and non-literary texts from diverse cultures and periods, including Australian texts by Aboriginal writers and/or Torres Strait Islander writers.

Pathways

A course of study in English promotes open-mindedness, imagination, critical awareness and intellectual flexibility — skills that prepare students for local and global citizenship, and for lifelong learning across a wide range of contexts.

Objectives

By the conclusion of the course of study, students will:

- use patterns and conventions of genres to achieve particular purposes in cultural contexts and social situations
- establish and maintain roles of the writer/speaker/designer and relationships with audiences
- create and analyse perspectives and representations of concepts, identities, times and places
- make use of and analyse the ways cultural assumptions, attitudes, values and beliefs underpin texts and invite audiences to take up positions
- use aesthetic features and stylistic devices to achieve purposes and analyse their effects in texts
- select and synthesise subject matter to support perspectives
- organise and sequence subject matter to achieve particular purposes
- use cohesive devices to emphasise ideas and connect parts of texts
- make language choices for particular purposes and contexts
- use grammar and language structures for particular purposes
- use mode-appropriate features to achieve particular purposes.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Perspectives and texts <ul style="list-style-type: none"> • Texts in contexts • Language and textual analysis • Responding to and creating texts 	Texts and culture <ul style="list-style-type: none"> • Texts in contexts • Language and textual analysis • Responding to and creating texts 	Textual connections <ul style="list-style-type: none"> • Conversations about issues in texts • Conversations about concepts in texts. 	Close study of literary texts <ul style="list-style-type: none"> • Creative responses to literary texts • Critical responses to literary texts

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Spoken persuasive response	25%	Summative internal assessment 3 (IA3): • Examination — extended response	25%
Summative internal assessment 2 (IA2): • Written response for a public audience	25%	Summative external assessment (EA): • Examination — extended response	25%

Food & Nutrition is the study of food in the context of food science, nutrition and food technologies. Students explore the chemical and functional properties of nutrients to create food solutions that maintain the beneficial nutritive values. This knowledge is fundamental for continued development of a safe and sustainable food system that can produce high quality, nutritious solutions with an extended shelf life. The food system includes the sectors of production, processing, distribution, consumption, research and development. Waste management, sustainability and food protection are overarching principles that have an impact on all sectors of the food system. Students will actively engage in a food and nutrition problem-solving process to create food solutions that contribute positively to preferred personal, social, ethical, economic, environmental, legal, sustainable and technological futures.

Food & Nutrition is a developmental course of study. In Unit 1, students develop an understanding of the chemical and functional properties of vitamins, minerals and protein-based food, as well as sensory profiling, food safety, spoilage and preservation. In Unit 2, students explore consumer food drivers, sensory profiling, labelling and food safety, and the development of food formulations. In Unit 3, students develop knowledge about the chemical, functional and sensory properties of carbohydrate- and fat-based food, and food safety, food preservation techniques and spoilage. In Unit 4, students focus on the investigation of problems for nutrition consumer markets and develop solutions for these while improving safety, nutrition, transparency and accessibility, as well as considering the wider impacts and implications of solutions.

Using a problem-solving process in Food and Nutrition, students learn to apply their food science, nutrition and technologies

knowledge to solve real-world food and nutrition problems. Students learn to explore complex, open-ended problems and develop food and nutrition solutions. They recognise and describe problems, determine solution success criteria, develop and communicate ideas and generate, evaluate and refine real-world-related solutions. Students justify their decision-making and acknowledge the societal, economic and environmental sustainability of their food and nutrition solutions. The problem-based learning framework in Food and Nutrition encourages students to become self-directed learners and develop beneficial collaboration and management skills.

Food & Nutrition is inclusive of students' needs, interests and aspirations. It challenges students to think about, respond to, and create solutions for contemporary problems in food and nutrition. Students will become enterprising individuals and make discerning decisions about the safe development and use of technologies in the local and global fields of food and nutrition.

In Food & Nutrition, students learn transferable 21st century skills that support their aspirations, including critical thinking, creative thinking, communication, collaboration and teamwork, personal and social skills, and information & communication technologies (ICT) skills. Students become adaptable and resilient through their problem-solving learning experiences. These skills enable students to innovate and collaborate with people in the fields of science, technology, engineering and health to create solutions to contemporary problems in food and nutrition.

Pathways

A course of study in Food & Nutrition can establish a basis for further education and employment in the fields of science, technology, engineering and health.

Objectives

By the conclusion of the course of study, students will:

- recognise and describe food and nutrition facts and principles
- explain food and nutrition ideas and problems
- analyse problems, information and data
- determine solution requirements and criteria
- synthesise information and data
- generate solutions to provide data to determine the feasibility of the solution
- evaluate and refine ideas and solutions to make justified recommendations for enhancement
- make decisions about and use mode-appropriate features, language and conventions for particular purposes and contexts.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Food science of vitamins, minerals and protein <ul style="list-style-type: none">• Introduction to the food system• Vitamins and minerals• Protein	Food drivers and emerging trends <ul style="list-style-type: none">• Consumer food drivers• Sensory profiling• Food safety and labelling• Food formulation for consumers	Food science of carbohydrate and fat <ul style="list-style-type: none">• Carbohydrate• Fat	Food solution development for nutrition consumer markets <ul style="list-style-type: none">• Formulation and reformulation for nutrition consumer markets• Nutrition consumer markets

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): <ul style="list-style-type: none">• Examination — combination response	25%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• Food & Nutrition solution	25%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none">• Food & Nutrition solution	25%	Summative external assessment (EA): <ul style="list-style-type: none">• Examination — combination response	25%

General Mathematics

General senior subject

General

Mathematics is a unique and powerful intellectual discipline that is used to investigate patterns, order, generality and uncertainty. It is a way of thinking in which problems are explored and solved through observation, reflection and logical reasoning. It uses a concise system of communication, with written, symbolic, spoken and visual components. Mathematics is creative, requires initiative and promotes curiosity in an increasingly complex and data-driven world. It is the foundation of all quantitative disciplines.

To prepare students with the knowledge, skills and confidence to participate effectively in the community and the economy requires the development of skills that reflect the demands of the 21st century. Students undertaking Mathematics will develop their critical and creative thinking, oral and written communication, information & communication technologies (ICT) capability, ability to collaborate, and sense of personal and social responsibility — ultimately becoming lifelong learners who demonstrate initiative when facing a challenge. The use of technology to make connections between mathematical theory, practice and application has a positive effect on the development of conceptual understanding and student disposition towards mathematics.

Mathematics teaching and learning practices range from practising essential mathematical routines to develop procedural fluency, through to investigating scenarios, modelling the real world, solving problems and explaining reasoning. When students achieve procedural fluency, they carry out procedures flexibly, accurately and efficiently. When factual knowledge and concepts come to mind readily, students are able to make more complex use of knowledge to successfully formulate, represent and solve mathematical problems. Problem-solving helps to develop an ability to transfer mathematical skills and ideas

between different contexts. This assists students to make connections between related concepts and adapt what they already know to new and unfamiliar situations. With appropriate effort and experience, through discussion, collaboration and reflection of ideas, students should develop confidence and experience success in their use of mathematics.

The major domains of mathematics in General Mathematics are Number and algebra, Measurement and geometry, Statistics and Networks and matrices, building on the content of the P–10 Australian Curriculum. Learning reinforces prior knowledge and further develops key mathematical ideas, including rates and percentages, concepts from financial mathematics, linear and non-linear expressions, sequences, the use of matrices and networks to model and solve authentic problems, the use of trigonometry to find solutions to practical problems, and the exploration of real-world phenomena in statistics.

General Mathematics is designed for students who want to extend their mathematical skills beyond Year 10 but whose future studies or employment pathways do not require calculus. It incorporates a practical approach that equips learners for their needs as future citizens. Students will learn to ask appropriate questions, map out pathways, reason about complex solutions, set up models and communicate in different forms. They will experience the relevance of mathematics to their daily lives, communities and cultural backgrounds. They will develop the ability to understand, analyse and take action regarding social issues in their world. When students gain skill and self-assurance, when they understand the content and when they evaluate their success by using and transferring their knowledge, they develop a mathematical mindset.

Pathways

A course of study in General Mathematics can establish a basis for further education and employment in the fields of business, commerce, education, finance, IT, social science and the arts.

Objectives

By the conclusion of the course of study, students will:

- recall mathematical knowledge
- use mathematical knowledge
- communicate mathematical knowledge
- evaluate the reasonableness of solutions
- justify procedures and decisions
- solve mathematical problems.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Money, measurement, algebra and linear equations <ul style="list-style-type: none"> • Consumer arithmetic • Shape and measurement • Similarity and scale • Algebra • Linear equations and their graphs 	Applications of linear equations and trigonometry, matrices and univariate data analysis <ul style="list-style-type: none"> • Applications of linear equations and their graphs • Applications of trigonometry • Matrices • Univariate data analysis 1 • Univariate data analysis 2 	Bivariate data and time series analysis, sequences and Earth geometry <ul style="list-style-type: none"> • Bivariate data analysis 1 • Bivariate data analysis 2 • Time series analysis • Growth and decay in sequences • Earth geometry and time zones 	Investing and networking <ul style="list-style-type: none"> • Loans, investments and annuities 1 • Loans, investments and annuities 2 • Graphs and networks • Networks and decision mathematics 1 • Networks and decision mathematics 2

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): 20% Problem-solving and modelling task			
Summative internal assessment 2 (IA2): • Examination — short response	15%	Summative internal assessment 3 (IA3): • Examination — short response	15%
Summative external assessment (EA): 50% • Examination — combination response			

Geography teaches us about the significance of 'place' and 'space' in understanding our world. These two concepts are foundational to the discipline, with the concepts of environment, interconnection, sustainability, scale and change building on this foundation. By observing and measuring spatial, environmental, economic, political, social and cultural factors, geography provides a way of thinking about contemporary challenges and opportunities.

Teaching and learning in Geography are underpinned by inquiry, through which students investigate places in Australia and across the globe. When students think geographically, they observe, gather, organise, analyse and present data and information across a range of scales.

Fieldwork is central to the study of Geography. It provides authentic opportunities for students to engage in real-world applications of geographical skills and thinking, including the collection and representation of data. Fieldwork also encourages participation in collaborative learning and engagement with the world in which students live.

Spatial technologies are also core components of contemporary geography. These technologies provide a real-world experience of Science, Technology, Engineering and Maths (STEM), allowing students to interact with particular geographic phenomena through dynamic, three-dimensional representations that take the familiar form of maps. The skills of spatial visualisation, representation and analysis are highly valued in an increasingly digital and globalised world.

In Geography, students engage in a range of learning experiences that develop their geographical skills and thinking through the exploration of geographical challenges and

their effects on people, places and the environment. Students are exposed to a variety of contemporary problems and challenges affecting people and places across the globe, at a range of scales. These challenges include responding to risk in hazard zones, planning sustainable places, managing land cover transformations and planning for population change.

This course of study enables students to appreciate and promote a more sustainable way of life. Through analysing and applying geographical knowledge, students develop an understanding of the complexities involved in sustainable planning and management practices. Geography aims to encourage students to become informed and adaptable so they develop the skills required to interpret global concerns and make genuine and creative contributions to society. It contributes to their development as global citizens who recognise the challenges of sustainability and the implications for their own and others' lives.

Pathways

A course of study in Geography can establish a basis for further education and employment in the fields of urban and environmental design, planning and management; biological and environmental science; conservation and land management; emergency response and hazard management; oceanography, surveying, global security, economics, business, law, engineering, architecture, information technology, and science.

Objectives

By the conclusion of the course of study, students will:

- explain geographical processes
- comprehend geographic patterns
- analyse geographical data and information
- apply geographical understanding
- propose action
- communicate geographical understanding using appropriate forms of geographical communication.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Responding to risk and vulnerability in hazard zones <ul style="list-style-type: none">• Natural hazard zones• Ecological hazard zones	Planning sustainable places <ul style="list-style-type: none">• Responding to challenges facing a place in Australia• Managing challenges facing a megacity	Responding to land cover transformations <ul style="list-style-type: none">• Land cover transformations and climate change• Responding to local land cover transformations	Managing population change <ul style="list-style-type: none">• Population challenges in Australia• Global population change

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): <ul style="list-style-type: none">• Examination — combination response	25%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• Data report	25%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none">• Field report	25%	Summative external assessment (EA): <ul style="list-style-type: none">• Examination — combination response	25%

The need to communicate is the foundation for all language development. People use language to achieve their personal communicative needs — to express, exchange, interpret and negotiate meaning, and to understand the world around them. The central goal for additional language acquisition is communication. Students do not simply learn a language — they participate in a range of interactions in which they exchange meaning and become active participants in understanding and constructing written, spoken and visual texts.

Additional language acquisition provides students with opportunities to reflect on their understanding of a language and the communities that use it, while also assisting in the effective negotiation of experiences and meaning across cultures and languages. Communicating with people from Japanese-speaking communities provides insight into the purpose and nature of language and promotes greater sensitivity to, and understanding of, linguistic structures, including the linguistic structures of English. As students develop the ability to explore cultural diversity and similarities between another language and their own, this engagement with other languages and cultures fosters intercultural understanding.

Language acquisition occurs in social and cultural settings. It involves communicating across a range of contexts for a variety of purposes, in a manner appropriate to context. As students experience and evaluate a range of different text types, they reorganise their thinking to accommodate other linguistic and intercultural knowledge and textual conventions. This informs their capacity to create texts for a range of contexts, purposes and audiences.

Central to the capacity to evaluate and create texts are the skills of critical and creative thinking, intellectual flexibility and problem-solving. Acquiring an additional language provides the opportunity to

develop these interrelated skills, and requires students to use language in a meaningful way through the exchange of information, ideas and perspectives relevant to their life experiences.

For exchanges to be relevant and useful, additional language acquisition must position students at the centre of their own learning. When students communicate their own aspirations, values, opinions, ideas and relationships, the personalisation of each student's learning creates a stronger connection with the language. Activities and tasks are developed to fit within the student's life experience.

The ability to communicate in an additional language such as Japanese is an important 21st century skill. Students develop knowledge, understanding and skills that enable successful participation in a global society. Communication in an additional language expands students' horizons and opportunities as national and global citizens.

Additional language acquisition contributes to and enriches intellectual, educational, linguistic, metacognitive, personal, social and cultural development. It requires intellectual discipline and systematic approaches to learning, which are characterised by effective planning and organisation, incorporating processes of self-management and self-monitoring.

Pathways

A course of study in Japanese can establish a basis for further education and employment in many professions and industries, particularly those where the knowledge of an additional language and the intercultural understanding it encompasses could be of value, such as business, hospitality, law, science, technology, sociology and education.

Objectives

By the conclusion of the course of study, students will:

- comprehend Japanese to understand information, ideas, opinions and experiences
- identify tone, purpose, context and audience to infer meaning
- analyse and evaluate information and ideas to draw conclusions
- apply knowledge of language elements of Japanese to construct meaning
- structure, sequence and synthesise information to justify opinions and perspectives
- communicate using contextually appropriate Japanese.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
私の暮らし — My world <ul style="list-style-type: none"> Family/carers Peers Education 	私達の世界をたんけんする — Exploring our world <ul style="list-style-type: none"> Travel and exploration Social customs Japanese influences around the world 	私達の社会、文化とアイデンティティ — Our society; culture and identity <ul style="list-style-type: none"> Lifestyles and leisure The arts, entertainment and sports Groups in society 	私の現在と将来 — My present; my future <ul style="list-style-type: none"> The present Future choices

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Examination — short response	20%	Summative internal assessment 3 (IA3): • Multimodal presentation and interview	30%
Summative internal assessment 2 (IA2): • Examination — extended response	25%	Summative external assessment (EA): • Examination — combination response	25%

Legal Studies focuses on the interaction between society and the discipline of law. Students study the legal system and how it regulates activities and aims to protect the rights of individuals, while balancing these with obligations and responsibilities. An understanding of legal processes and concepts enables citizens to be better informed and able to constructively question and contribute to the improvement of laws and legal processes. This is important as the law is dynamic and evolving, based on values, customs and norms that are challenged by technology, society and global influences.

Legal Studies explores the role and development of law in response to current issues. The subject starts with the foundations of law and explores the criminal justice process through to punishment and sentencing. Students then study the civil justice system, focusing on contract law and negligence. With increasing complexity, students critically examine issues of governance that are the foundation of the Australian and Queensland legal systems, before they explore contemporary issues of law reform and change. The study finishes with considering Australian and international human rights issues. Throughout the course, students analyse issues and evaluate how the rule of law, justice and equity can be achieved in contemporary contexts.

The primary skills of inquiry, critical thinking, problem-solving and reasoning empower Legal Studies students to make informed and ethical decisions and recommendations. Learning is based on an inquiry approach that develops reflection skills and metacognitive awareness. Through inquiry, students identify and describe legal issues, explore information and data, analyse, evaluate to propose recommendations, and create responses that convey legal meaning. They improve their research skills by using

information and communication technology (ICT) and databases to access research, commentary, case law and legislation. Students analyse legal information to determine the nature and scope of the legal issue and examine different or opposing views, which are evaluated against legal criteria. These are critical skills that allow students to think strategically in the 21st century.

Knowledge of the law enables students to have confidence in approaching and accessing the legal system and provides them with an appreciation of the influences that shape the system. Legal knowledge empowers students to make constructive judgments on, and knowledgeable commentaries about, the law and its processes. Students examine and justify viewpoints involved in legal issues, while also developing respect for diversity. Legal Studies satisfies interest and curiosity as students question, explore and discuss tensions between changing social values, justice and equitable outcomes.

Legal Studies enables students to appreciate how the legal system is relevant to them and their communities. The subject enhances students' abilities to contribute in an informed and considered way to legal challenges and change, both in Australia and globally.

Pathways

A course of study in Legal Studies can establish a basis for further education and employment in the fields of law, law enforcement, criminology, justice studies and politics. The knowledge, skills and attitudes students gain are transferable to all discipline areas and post-schooling tertiary pathways. The research and analytical skills this course develops are universally valued

in business, health, science and engineering industries.

Objectives

By the conclusion of the course of study, students will:

- comprehend legal concepts, principles and processes
- select legal information from sources
- analyse legal issues
- evaluate legal situations
- create responses that communicate meaning to suit the intended purpose.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Beyond reasonable doubt <ul style="list-style-type: none"> • Legal foundations • Criminal investigation process • Criminal trial process • Punishment and sentencing 	Balance of probabilities <ul style="list-style-type: none"> • Civil law foundations • Contractual obligations • Negligence and the duty of care 	Law, governance and change <ul style="list-style-type: none"> • Governance in Australia • Law reform within a dynamic society 	Human rights in legal contexts <ul style="list-style-type: none"> • Human rights • Australia's legal response to international law and human rights • Human rights in Australian contexts

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1):	25%	Summative internal assessment 3 (IA3):	25%
• Examination — combination response		• Investigation — analytical essay	
Summative internal assessment 2 (IA2):	25%	Summative external assessment (EA):	25%
• Investigation — inquiry report		• Examination — combination response	

Marine Science

General senior subject

General

Marine Science provides opportunities for students to study an interdisciplinary science focusing on marine environments and the consequences of human influences on ocean resources. In Unit 1, students develop their understanding of oceanography. In Unit 2, they engage with the concept of marine biology. In Unit 3, students study coral reef ecology, changes to the reef and the connectivity between marine systems. This knowledge is linked in Unit 4 with ocean issues and resource management where students apply knowledge from Unit 3 to consider the future of our oceans and techniques for managing fisheries. Students will learn valuable skills required for the scientific investigation of questions. In addition, they will become citizens who are better informed about the world around them and who have the critical skills to evaluate and make evidence-based decisions about current scientific issues.

Marine Science aims to develop students':

- sense of wonder and curiosity about the complexity of marine life and a respect for all living things and the environment
- appreciation of global stewardship, which involves an understanding of the value systems associated with the marine environment and its importance in maintaining biological support systems
- interpretation of scientific evidence to make judgments and decisions about the effective management of the marine environment
- investigative skills that can be used to evaluate environmental issues and their potential to affect the fragility of marine environments
- understanding of how marine systems interact and are interrelated; the flow of matter and energy through and between these systems, and the processes by which they persist and change

- understanding of major marine science concepts, theories and models related to marine systems at all scales, from species to ecosystem
- appreciation of how marine knowledge has developed over time and continues to develop; how scientists use marine science in a wide range of applications; and how marine knowledge influences society in local, regional and global contexts
- ability to plan and carry out fieldwork, laboratory and other research investigations, including the collection and analysis of qualitative and quantitative data and the interpretation of evidence
- ability to use sound evidence-based arguments creatively and analytically when evaluating claims and applying biological knowledge
- ability to communicate marine science understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

Pathways

A course of study in Marine Science can establish a basis for further education and employment in the fields of marine sciences, biotechnology, aquaculture, environmental rehabilitation, biosecurity, quarantine, conservation and sustainability.

Objectives

By the conclusion of the course of study, students will:

- describe ideas and findings
- apply understanding
- analyse data
- interpret evidence
- evaluate conclusions, claims and processes
- investigate phenomena.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Oceanography <ul style="list-style-type: none"> • An ocean planet • The dynamic shore 	Marine biology <ul style="list-style-type: none"> • Marine ecology and biodiversity • Marine environmental management 	Marine systems — connections and change <ul style="list-style-type: none"> • The reef and beyond • Changes on the reef 	Ocean issues and resource management <ul style="list-style-type: none"> • Oceans of the future • Managing fisheries

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Data test	10%	Summative internal assessment 3 (IA3): • Research investigation	20%
Summative internal assessment 2 (IA2): • Student experiment	20%		
Summative external assessment (EA): 50% • Examination — combination response			

Mathematical Methods

General senior subject

General

Mathematics is a unique and powerful intellectual discipline that is used to investigate patterns, order, generality and uncertainty. It is a way of thinking in which problems are explored and solved through observation, reflection and logical reasoning. It uses a concise system of communication, with written, symbolic, spoken and visual components. Mathematics is creative, requires initiative and promotes curiosity in an increasingly complex and data-driven world. It is the foundation of all quantitative disciplines.

To prepare students with the knowledge, skills and confidence to participate effectively in the community and the economy requires the development of skills that reflect the demands of the 21st century. Students undertaking Mathematics will develop their critical and creative thinking, oral and written communication, information & communication technologies (ICT) capability, ability to collaborate, and sense of personal and social responsibility — ultimately becoming lifelong learners who demonstrate initiative when facing a challenge. The use of technology to make connections between mathematical theory, practice and application has a positive effect on the development of conceptual understanding and student disposition towards mathematics.

Mathematics teaching and learning practices range from practising essential mathematical routines to develop procedural fluency, through to investigating scenarios, modelling the real world, solving problems and explaining reasoning. When students achieve procedural fluency, they carry out procedures flexibly, accurately and efficiently. When factual knowledge and concepts come to mind readily, students are able to make more complex use of knowledge to successfully formulate, represent and solve mathematical problems. Problem-solving helps to develop an ability

to transfer mathematical skills and ideas between different contexts. This assists students to make connections between related concepts and adapt what they already know to new and unfamiliar situations. With appropriate effort and experience, through discussion, collaboration and reflection of ideas, students should develop confidence and experience success in their use of mathematics.

The major domains of mathematics in Mathematical Methods are Algebra, Functions, relations and their graphs, Calculus and Statistics. Topics are developed systematically, with increasing levels of sophistication, complexity and connection, and build on algebra, functions and their graphs, and probability from the P–10 Australian Curriculum. Calculus is essential for developing an understanding of the physical world. The domain Statistics is used to describe and analyse phenomena involving uncertainty and variation. Both are the basis for developing effective models of the world and solving complex and abstract mathematical problems. The ability to translate written, numerical, algebraic, symbolic and graphical information from one representation to another is a vital part of learning in Mathematical Methods.

Students who undertake Mathematical Methods will see the connections between mathematics and other areas of the curriculum and apply their mathematical skills to real-world problems, becoming critical thinkers, innovators and problem-solvers. Through solving problems and developing models, they will appreciate that mathematics and statistics are dynamic tools that are critically important in the 21st century.

Pathways

A course of study in Mathematical Methods can establish a basis for further education and employment in the fields of natural and physical sciences (especially physics and chemistry), mathematics and science education, medical and health sciences (including human biology, biomedical science, nanoscience and forensics), engineering (including chemical, civil, electrical and mechanical engineering, avionics, communications and mining), computer science (including electronics and software design), psychology and business.

Objectives

By the conclusion of the course of study, students will:

- recall mathematical knowledge
- use mathematical knowledge
- communicate mathematical knowledge
- evaluate the reasonableness of solutions
- justify procedures and decisions
- solve mathematical problems.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Surds, algebra, functions and probability <ul style="list-style-type: none"> • Surds and quadratic functions • Binomial expansion and cubic functions • Functions and relations • Trigonometric functions • Probability 	Calculus and further functions <ul style="list-style-type: none"> • Exponential functions • Logarithms and logarithmic functions • Introduction to differential calculus • Applications of differential calculus • Further differentiation 	Further calculus and introduction to statistics <ul style="list-style-type: none"> • Differentiation of exponential and logarithmic functions • Differentiation of trigonometric functions and differentiation rules • Further applications of differentiation • Introduction to integration • Discrete random variables 	Further calculus, trigonometry and statistics <ul style="list-style-type: none"> • Further integration • Trigonometry • Continuous random variables and the normal distribution • Sampling and proportions • Interval estimates for proportions

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): 20% Problem-solving and modelling task			
Summative internal assessment 2 (IA2): • Examination — short response	15%	Summative internal assessment 3 (IA3): • Examination — short response	15%
Summative external assessment (EA): 50% • Examination — combination response			

Modern History is a discipline-based subject where students examine traces of humanity's recent past so they may form their own views about the Modern World since 1750. Through Modern History, students' curiosity and imagination is invigorated while their appreciation of civilisation is broadened and deepened. Students consider different perspectives and learn that interpretations and explanations of events and developments in the past are contestable and tentative. Modern History distinguishes itself from other subjects by enabling students to empathise with others and make meaningful connections between what existed previously, and the world being lived in today — all of which may help build a better tomorrow.

Modern History has two main aims. First, Modern History seeks to have students gain historical knowledge and understanding about some of the main forces that have contributed to the development of the Modern World. Second, Modern History aims to have students engage in historical thinking and form a historical consciousness in relation to these same forces. Both aims complement and build on the learning covered in the Australian Curriculum: History 7–10. The first aim is achieved through the thematic organisation of Modern History around four of the forces that have helped to shape the Modern World — ideas, movements, national experiences and international experiences. In each unit, students explore the nature, origins, development, legacies and contemporary significance of the force being examined. The second aim is achieved through the rigorous application of historical concepts and historical skills across the syllabus. To fulfil both aims, engagement with a historical inquiry process is integral and results in students devising historical questions and

conducting research, analysing, evaluating and synthesising evidence from historical sources, and communicating the outcomes of their historical thinking.

Modern History benefits students as it enables them to thrive in a dynamic, globalised and knowledge-based world. Through Modern History, students acquire an intellectual toolkit consisting of literacy, numeracy and 21st century skills. This ensures students of Modern History gain a range of transferable skills that will help them forge their own pathways to personal and professional success, as well as become empathetic and critically literate citizens who are equipped to embrace a multicultural, pluralistic, inclusive, democratic, compassionate and sustainable future.

Pathways

A course of study in Modern History can establish a basis for further education and employment in the fields of history, education, psychology, sociology, law, business, economics, politics, journalism, the media, writing, academia and strategic analysis.

Objectives

By the conclusion of the course of study, students will:

- devise historical questions and conduct research
- comprehend terms, concepts and issues
- analyse evidence from historical sources
- evaluate evidence from historical sources
- synthesise evidence from historical sources
- communicate to suit purpose.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
<p>Ideas in the Modern World</p> <p>Schools select two of the following topics to study in this unit:</p> <ul style="list-style-type: none"> • Australian Frontier Wars, 1788–1930s (First Fleet arrives in Australia – Caledon Bay Crisis ends) • Age of Enlightenment, 1750s–1789 (Encyclopédie published – French Revolution begins) • Industrial Revolution, 1760s–1890s (Spinning Jenny invented – Kinetoscope developed) • American Revolution, 1763–1783 (French and Indian War ends – Treaty of Paris signed) • French Revolution, 1789–1799 (Estates General meets – New Consulate established) • Age of Imperialism, 1848–1914 (Second Anglo-Sikh War begins – World War I begins) • Meiji Restoration, 1868–1912 (Meiji Government established – Emperor Meiji dies) • Boxer Rebellion and its aftermath, 1900–1911 (Boxer militancy in Pingyuan begins – overthrow of the Qing Dynasty) • Russian Revolution, 1905–1920s (Bloody Sunday takes place – Russian Civil War ends) • Xinhai Revolution and its aftermath, 	<p>Movements in the Modern World</p> <p>Schools select two of the following topics to study in this unit:</p> <ul style="list-style-type: none"> • Empowerment of First Nations Australians since 1938 (first Day of Mourning protest takes place) • Independence movement in India, 1857–1947 (Sepoy Rebellion begins – Indian Independence Act 1947 becomes law) • Workers' movement since the 1860s (Great Shoemakers Strike in New England begins) • Women's movement since 1893 (Women's suffrage in New Zealand becomes law) • May Fourth Movement in China and its aftermath, 1919–1930s (Student protests at Beijing University begin – the New Life Movement begins) • Independence movement in Algeria, 1945–1962 (demonstrations in Setif begin – Algerian independence declared) • Independence movement in Vietnam, 1945–1975 (Vietnamese independence declared – Saigon falls to North Vietnamese forces) • Anti-apartheid movement in South Africa, 1948–1991 (apartheid laws start – apartheid laws end) 	<p>National experiences in the Modern World</p> <p>Schools select two of the following topics to study in this unit:</p> <ul style="list-style-type: none"> • Australia since 1901 (Federation of Australia) • United Kingdom since 1901 (Edwardian Era begins) • France, 1799–1815 (Coup of 18 Brumaire begins – Hundred Days end) • New Zealand since 1841 (separate colony of New Zealand established) • Germany since 1914 (World War I begins) • United States of America, 1917–1945 (entry into World War I – World War II ends) • Soviet Union, 1920s–1945 (Russian Civil War ends – World War II ends) • Japan since 1931 (invasion of Manchuria begins) • China since 1931 (invasion of Manchuria begins) • Indonesia since 1942 (Japanese occupation begins) • India since 1947 (Indian Independence Act of 1947 becomes law) • Israel since 1917 (announcement of the Balfour Declaration) • South Korea since 1948 (Republic of Korea begins). 	<p>International experiences in the Modern World</p> <p>Schools select one of the following topics to study in this unit:</p> <ul style="list-style-type: none"> • Australian engagement with Asia since 1945 (World War II in the Pacific ends) • Search for collective peace and security since 1815 (Concert of Europe begins) • Trade and commerce between nations since 1833 (Treaty of Amity and Commerce between Siam and the United States of America signed) • Mass migrations since 1848 (California Gold Rush begins) • Information Age since 1936 (On Computable Numbers published) • Genocides and ethnic cleansings since the 1930s (Holocaust begins) • Nuclear Age since 1945 (first atomic bomb detonated) • Cold War and its aftermath, 1945–2014 (Yalta Conference begins – Russo-Ukrainian War begins) • Struggle for peace in the Middle East since 1948 (Arab-Israeli War begins) • Cultural globalisation since 1956 (international broadcast of the 1956 Summer Olympics in Melbourne takes place) • Space exploration since the 1950s (publication of articles focused on space travel) • Rights and recognition of First Peoples since 1982 (United Nations Working Group on

Unit 1	Unit 2	Unit 3	Unit 4
<p>1911–1916 (Wuchang Uprising begins – death of Yuan Shikai)</p> <ul style="list-style-type: none"> • Iranian Revolution and its aftermath, 1977–1980s (anti-Shah demonstrations take place – Iran becomes an Islamic Republic) • Arab Spring since 2010 (Tunisian Revolution begins) • Alternative topic for Unit 1. 	<ul style="list-style-type: none"> • African-American civil rights movement since 1954 (judgment in <i>Brown v. Board of Education</i> delivered) • Environmental movement since the 1960s (<i>Silent Spring</i> published) • LGBTQIA+ civil rights movement since 1969 (Stonewall Riots begin) • Pro-democracy movement in Myanmar (Burma) since 1988 (People Power Uprising begins) • Alternative topic for Unit 2. 		<p>Indigenous Populations established)</p> <ul style="list-style-type: none"> • Terrorism, anti-terrorism and counter-terrorism since 1984 (Brighton Hotel bombing takes place). <p>Schools select one of the topic options that has been nominated by the QCAA for the external assessment and has not been studied in Topic 1. Schools will be notified of the topic options at least two years before the external assessment is implemented.</p>

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Examination — extended response	25%	Summative internal assessment 3 (IA3): • Investigation	25%
Summative internal assessment 2 (IA2): • Investigation	25%	Summative external assessment (EA): • Examination — short response	25%

Music

General senior subject

General

Music is a unique art form that uses sound and silence as a means of personal expression. It allows for the expression of the intellect, imagination and emotion and the exploration of values. Music occupies a significant place in everyday life of all cultures and societies, serving social, cultural, celebratory, political and educational roles.

The study of music combines the development of cognitive, psychomotor and affective domains through making and responding to music. The development of musicianship through making (composition and performance) and responding (musicology) is at the centre of the study of music.

Through composition, students use music elements and concepts, applying their knowledge and understanding of compositional devices to create new music works. Students resolve music ideas to convey meaning and/or emotion to an audience.

Through performance, students sing and play music, demonstrating their practical music skills through refining solo and/or ensemble performances. Students realise music ideas through the demonstration and interpretation of music elements and concepts to convey meaning and/or emotion to an audience.

In musicology, students analyse the use of music elements and concepts in a variety of contexts, styles and genres. They evaluate music through the synthesis of analytical information to justify a viewpoint.

In an age of change, Music has the means to prepare students for a future of unimagined possibilities; in Music, students develop highly transferable skills and the capacity for flexible thinking and doing. Literacy in Music is an essential skill for both musician and audience, and learning in

Music prepares students to engage in a multimodal world. The study of Music provides students with opportunities for intellectual and personal growth, and to make a contribution to the culture of their community. Students develop the capacity for working independently and collaboratively, reflecting authentic practices of music performers, composers and audiences.

Pathways

A course of study in Music can establish a basis for further education and employment in the field of music, and more broadly, in creative industries, cultural institutions, administration and management, health, communications, education, public relations, research, science and technology. As more organisations value work-related creativity and diversity, the processes and practices of Music develop 21st century skills essential for many areas of employment. Specifically, the study of Music helps students develop creative and critical thinking, collaboration and communication skills, personal and social skills, and digital literacy — all of which is sought after in modern workplaces.

Objectives

By the conclusion of the course of study, students will:

- demonstrate technical skills
- use music elements and concepts
- analyse music
- apply compositional devices
- apply literacy skills
- interpret music elements and concepts
- evaluate music
- realise music ideas
- resolve music ideas.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Designs Through inquiry learning, the following is explored: How does the treatment and combination of different music elements enable musicians to design music that communicates meaning through performance and composition?	Identities Through inquiry learning, the following is explored: How do musicians use their understanding of music elements, concepts and practices to communicate cultural, political, social and personal identities when performing, composing and responding to music?	Innovations Through inquiry learning, the following is explored: How do musicians incorporate innovative music practices to communicate meaning when performing and composing?	Narratives Through inquiry learning, the following is explored: How do musicians manipulate music elements to communicate narrative when performing, composing and responding to music?

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): <ul style="list-style-type: none">• Performance	20%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• Project	35%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none">• Composition	20%		
Summative external assessment (EA): 25% <ul style="list-style-type: none">• Examination — extended response			

Music Extension

General senior subject

General

The Music Extension syllabus should be read in conjunction with the Music syllabus. In Music Extension, students follow an individual program of study designed to continue the development of refined musicianship skills. Music Extension encourages students to investigate music concepts and ideas relevant to their specialisation.

In the **Composition specialisation** (making), students create and resolve new music works. They demonstrate use of music concepts and manipulate music concepts to express meaning and/or emotion to an audience through resolved compositions.

In the **Musicology specialisation** (responding), students investigate and analyse music works and ideas. They synthesise analytical information about music, and document sources and references about music to support research.

In the **Performance specialisation** (making), students realise music works, demonstrating technical skills and understanding. They make decisions about music, interpret music elements and concepts, and realise music ideas in their performances.

Music Extension prepares students for a future of unimagined possibilities, helping them to become self-motivated and emotionally aware. As a unique means of expression, music makes a profound contribution to personal, social and cultural identities. Students develop transversal skills, becoming adaptable and innovative problem-solvers and collaborative team members who make informed decisions. As enquirers, students develop their ability to analyse and critically evaluate. Literacy in Music Extension is an essential skill for composers, musicologists and performers, and learning in Music Extension prepares students to engage in a multimodal world.

Pathways

A course of study in Music Extension can establish a basis for further education and employment in the field of music, and more broadly, in creative industries, cultural institutions, administration and management, health, communications, education, public relations, research, science and technology.

Objectives

Common objectives

By the conclusion of the course of study, **all** students will:

- analyse music
- apply literacy skills
- evaluate music.

Specialist objectives

By the conclusion of the course of study, in addition to the common objectives, students who specialise in **composition** will also:

- apply compositional devices
- manipulate music elements and concepts
- resolve music ideas.

By the conclusion of the course of study, in addition to the common objectives, students who specialise in **musicology** will also:

- express meaning or ideas about music
- investigate music and ideas about music
- synthesise information.

By the conclusion of the course of study, in addition to the common objectives, students who specialise in **performance** will also:

- apply technical skills
- interpret music elements and concepts
- realise music ideas.

Structure

Unit 3	Unit 4
Explore <ul style="list-style-type: none"> • Key idea 1: Initiate best practice • Key idea 2: Consolidate best practice 	Emerge <ul style="list-style-type: none"> • Key idea 3: Independent best practice

Assessment

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Note: The Summative external assessment (EA): Examination — extended response is the same assessment for all three specialisations.

Summative assessments — Composition specialisation

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Composition 1	20%	Summative internal assessment 3 (IA3): • Composition project	35%
Summative internal assessment 2 (IA2): • Composition 2	20%		
Summative external assessment (EA): 25% • Examination — extended response			

Summative assessments — Musicology specialisation

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Investigation 1	20%	Summative internal assessment 3 (IA3): • Musicology project	35%
Summative internal assessment 2 (IA2): • Investigation 2	20%		
Summative external assessment (EA): 25% • Examination — extended response			

Summative assessments — Performance specialisation

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): <ul style="list-style-type: none">• Performance 1	20%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• Performance project	35%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none">• Performance 2	20%		
Summative external assessment (EA): 25% <ul style="list-style-type: none">• Examination — extended response			

The Physical Education syllabus is developmental and becomes increasingly complex across the four units. In Unit 1, students develop an understanding of the fundamental concepts and principles underpinning their learning of movement sequences and how they can enhance movement from a biomechanical perspective. In Unit 2, students broaden their perspective by determining the psychological factors, barriers and enablers that influence their performance and engagement in physical activity. In Unit 3, students enhance their understanding of factors that develop tactical awareness and influence ethical behaviour of their own and others' performance in physical activity. In Unit 4, students explore energy, fitness and training concepts and principles to optimise personal performance.

Students learn experientially through three stages of an inquiry approach to ascertain relationships between the scientific bases and the physical activity contexts. Students recognise and explain concepts and principles about and through movement, and demonstrate and apply body and movement concepts to movement sequences and movement strategies. Through their purposeful and authentic experiences in physical activities, students gather, analyse and synthesise data to devise strategies to optimise engagement and performance. They evaluate and justify strategies about and in movement by drawing on informed, reflective decision-making.

Physically educated learners develop the 21st century skills of critical thinking, creative thinking, communication, personal and social skills, collaboration and teamwork, and information and communication technologies

skills through rich and diverse learning experiences about, through and in physical activity. Physical Education fosters an appreciation of the values and knowledge within and across disciplines, and builds on students' capacities to be self-directed, work towards specific goals, develop positive behaviours and establish lifelong active engagement in a wide range of pathways beyond school.

Pathways

A course of study in Physical Education can establish a basis for further education and employment in the fields of exercise science, biomechanics, the allied health professions, psychology, teaching, sport journalism, sport marketing and management, sport promotion, sport development and coaching.

Objectives

By the conclusion of the course of study, students will:

- recognise and explain concepts and principles about movement
- demonstrate specialised movement sequences and movement strategies
- apply concepts to specialised movement sequences and movement strategies
- analyse and synthesise data to devise strategies about movement
- evaluate strategies about and in movement
- justify strategies about and in movement
- make decisions about and use language, conventions and mode-appropriate features for particular purposes and contexts.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Motor learning, functional anatomy and biomechanics in physical activity <ul style="list-style-type: none"> • Motor learning in physical activity • Functional anatomy and biomechanics in physical activity 	Sport psychology and equity in physical activity <ul style="list-style-type: none"> • Sport psychology in physical activity • Equity — barriers and enablers 	Tactical awareness and ethics in physical activity <ul style="list-style-type: none"> • Tactical awareness in physical activity • Ethics and integrity in physical activity 	Energy, fitness and training in physical activity <ul style="list-style-type: none"> • Energy, fitness and training integrated in physical activity

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Project — folio	25%	Summative internal assessment 3 (IA3): • Project — folio	25%
Summative internal assessment 2 (IA2): • Investigation — report	25%	Summative external assessment (EA): • Examination — combination response	25%

Physics

General senior subject

General

Physics provides opportunities for students to engage with the classical and modern understandings of the universe. In Unit 1, students learn about the fundamental concepts of thermodynamics, electricity and nuclear processes. In Unit 2, students learn about the concepts and theories that predict and describe the linear motion of objects. Further, they will explore how scientists explain some phenomena using an understanding of waves. In Unit 3, students engage with the concept of gravitational and electromagnetic fields, and the relevant forces associated with them. Finally, in Unit 4, students study modern physics theories and models that, despite being counterintuitive, are fundamental to our understanding of many common observable phenomena.

Students will learn valuable skills required for the scientific investigation of questions. In addition, they will become citizens who are better informed about the world around them, and who have the critical skills to evaluate and make evidence-based decisions about current scientific issues.

Physics aims to develop students':

- appreciation of the wonder of physics and the significant contribution physics has made to contemporary society
- understanding that diverse natural phenomena may be explained, analysed and predicted using concepts, models and theories that provide a reliable basis for action
- understanding of the ways in which matter and energy interact in physical systems across a range of scales
- understanding of the ways in which models and theories are refined, and new models and theories are developed in

physics; and how physics knowledge is used in a wide range of contexts and informs personal, local and global issues

- investigative skills, including the design and conduct of investigations to explore phenomena and solve problems, the collection and analysis of qualitative and quantitative data, and the interpretation of evidence
- ability to use accurate and precise measurement, valid and reliable evidence, and scepticism and intellectual rigour to evaluate claims
- ability to communicate physics understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

Pathways

A course of study in Physics can establish a basis for further education and employment in the fields of science, engineering, medicine and technology.

Objectives

By the conclusion of the course of study, students will:

- describe ideas and findings
- apply understanding
- analyse data
- interpret evidence
- evaluate conclusions, claims and processes
- investigate phenomena.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Thermal, nuclear and electrical physics <ul style="list-style-type: none"> • Heating processes • Ionising radiation and nuclear reactions • Electrical circuits 	Linear motion and waves <ul style="list-style-type: none"> • Linear motion and force • Waves 	Gravity and electromagnetism <ul style="list-style-type: none"> • Gravity and motion • Electromagnetism 	Revolutions in modern physics <ul style="list-style-type: none"> • Special relativity • Quantum theory • The Standard Model

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1):	10%	Summative internal assessment 3 (IA3):	20%
• Data test		• Research investigation	
Summative internal assessment 2 (IA2):	20%		
• Student experiment			
Summative external assessment (EA): 50% <ul style="list-style-type: none"> • Examination — combination response 			

Psychology provides opportunities for students to engage with concepts that explain behaviours and underlying cognitions. In Unit 1, students examine individual development in the form of the role of the brain, cognitive development, human consciousness and sleep. In Unit 2, students investigate the concept of intelligence, the process of diagnosis and how to classify psychological disorder and determine an effective treatment, and lastly, the contribution of emotion and motivation on the individual behaviour. In Unit 3, students examine individual thinking and how it is determined by the brain, including perception, memory, and learning. In Unit 4, students consider the influence of others by examining theories of social psychology, interpersonal processes, attitudes and cross-cultural psychology.

Psychology aims to develop students':

- interest in psychology and their appreciation for how this knowledge can be used to understand contemporary issues
- appreciation of the complex interactions, involving multiple parallel processes that continually influence human behaviour
- understanding that psychological knowledge has developed over time and is used in a variety of contexts, and is informed by social, cultural and ethical considerations
- ability to conduct a variety of field research and laboratory investigations involving collection and analysis of qualitative and quantitative data and interpretation of evidence
- ability to critically evaluate psychological concepts, interpretations, claims and conclusions with reference to evidence
- ability to communicate psychological understandings, findings, arguments and conclusions using appropriate representations, modes and genres.

Pathways

A course of study in Psychology can establish a basis for further education and employment in the fields of psychology, sales, human resourcing, training, social work, health, law, business, marketing and education.

Objectives

By the conclusion of the course of study, students will:

- describe ideas and findings
- apply understanding
- analyse data
- interpret evidence
- evaluate conclusions, claims and processes
- investigate phenomena.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Individual development <ul style="list-style-type: none"> • The role of the brain • Cognitive development • Consciousness, attention and sleep 	Individual behaviour <ul style="list-style-type: none"> • Intelligence • Diagnosis • Psychological disorders and treatments • Emotion and motivation 	Individual thinking <ul style="list-style-type: none"> • Brain function • Sensation and perception • Memory • Learning 	The influence of others <ul style="list-style-type: none"> • Social psychology • Interpersonal processes • Attitudes • Cross-cultural psychology

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1):	10%	Summative internal assessment 3 (IA3):	20%
• Data test		• Research investigation	
Summative internal assessment 2 (IA2):	20%		
• Student experiment			
Summative external assessment (EA): 50% <ul style="list-style-type: none"> • Examination — combination response 			

Specialist Mathematics

General senior subject

General

Mathematics is a unique and powerful intellectual discipline that is used to investigate patterns, order, generality and uncertainty. It is a way of thinking in which problems are explored and solved through observation, reflection and logical reasoning. It uses a concise system of communication, with written, symbolic, spoken and visual components. Mathematics is creative, requires initiative and promotes curiosity in an increasingly complex and data-driven world. It is the foundation of all quantitative disciplines.

To prepare students with the knowledge, skills and confidence to participate effectively in the community and the economy requires the development of skills that reflect the demands of the 21st century. Students undertaking Mathematics will develop their critical and creative thinking, oral and written communication, information & communication technologies (ICT) capability, ability to collaborate, and sense of personal and social responsibility — ultimately becoming lifelong learners who demonstrate initiative when facing a challenge. The use of technology to make connections between mathematical theory, practice and application has a positive effect on the development of conceptual understanding and student disposition towards mathematics.

Mathematics teaching and learning practices range from practising essential mathematical routines to develop procedural fluency, through to investigating scenarios, modelling the real world, solving problems and explaining reasoning. When students achieve procedural fluency, they carry out procedures flexibly, accurately and efficiently. When factual knowledge and concepts come to mind readily, students are able to make more complex use of knowledge to successfully formulate, represent and solve mathematical problems. Problem-solving helps to develop an ability

to transfer mathematical skills and ideas between different contexts. This assists students to make connections between related concepts and adapt what they already know to new and unfamiliar situations. With appropriate effort and experience, through discussion, collaboration and reflection of ideas, students should develop confidence and experience success in their use of mathematics.

The major domains of mathematical knowledge in Specialist Mathematics are Vectors and matrices, Real and complex numbers, Trigonometry, Statistics and Calculus. Topics are developed systematically, with increasing levels of sophistication, complexity and connection, building on functions, calculus, statistics from Mathematical Methods, while vectors, complex numbers and matrices are introduced. Functions and calculus are essential for creating models of the physical world. Statistics are used to describe and analyse phenomena involving probability, uncertainty and variation. Matrices, complex numbers and vectors are essential tools for explaining abstract or complex relationships that occur in scientific and technological endeavours.

Students who undertake Specialist Mathematics will develop confidence in their mathematical knowledge and ability, and gain a positive view of themselves as mathematics learners. They will gain an appreciation of the true nature of mathematics, its beauty and its power.

Pathways

A course of study in Specialist Mathematics can establish a basis for further education and employment in the fields of science, all branches of mathematics and statistics, computer science, medicine, engineering, finance and economics.

Objectives

By the conclusion of the course of study, students will:

- recall mathematical knowledge
- use mathematical knowledge
- communicate mathematical knowledge
- evaluate the reasonableness of solutions
- justify procedures and decisions
- solve mathematical problems.

Structure

Specialist Mathematics is to be undertaken in conjunction with, or on completion of, Mathematical Methods.

Unit 1	Unit 2	Unit 3	Unit 4
Combinatorics, proof, vectors and matrices <ul style="list-style-type: none"> • Combinatorics • Introduction to proof • Vectors in the plane • Algebra of vectors in two dimensions • Matrices 	Complex numbers, further proof, trigonometry, functions and transformations <ul style="list-style-type: none"> • Complex numbers • Complex arithmetic and algebra • Circle and geometric proofs • Trigonometry and functions • Matrices and transformations 	Further complex numbers, proof, vectors and matrices <ul style="list-style-type: none"> • Further complex numbers • Mathematical induction and trigonometric proofs • Vectors in two and three dimensions • Vector calculus • Further matrices 	Further calculus and statistical inference <ul style="list-style-type: none"> • Integration techniques • Applications of integral calculus • Rates of change and differential equations • Modelling motion • Statistical inference

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1):	20%	Summative internal assessment 3 (IA3):	15%
• Problem-solving and modelling task		• Examination — short response	
Summative internal assessment 2 (IA2):	15%		
• Examination — short response			
Summative external assessment (EA): 50% <ul style="list-style-type: none"> • Examination — combination response 			

Visual Art

General senior subject

General

Visual Art students have opportunities to construct knowledge and communicate personal interpretations by working as both artist and audience. In making artworks, students use their imagination and creativity to innovatively solve problems and experiment with visual language and expression. Students develop knowledge and skills when they create individualised responses and meaning by applying diverse art materials, techniques, technologies and processes. On their individual journey of exploration, students learn to communicate personal thoughts, feelings, ideas, experiences and observations. In responding to artworks, students investigate artistic expression and critically analyse artworks in diverse contexts. They consider meaning, purposes and theoretical approaches when ascribing aesthetic value and challenging ideas. Students interact with artists, artworks, institutions and communities to enrich their experiences and understandings of their own and others' art practices.

Visual Art uses an inquiry learning model, developing critical and creative thinking skills and individual responses through developing, researching, reflecting and resolving. Through making and responding, resolution and display of artworks, students understand and appreciate the role of visual art in past and present traditions and cultures, as well as the contributions of contemporary visual artists and their aesthetic, historical and cultural influences.

Pathways

This subject prepares young people for participation in the 21st century by fostering curiosity and imagination, and teaching students how to generate and apply new and creative solutions when problem-solving in a range of contexts. This learnt ability to think in divergent ways and produce creative and expressive responses enables future

artists, designers and craftspeople to innovate and collaborate with the fields of science, technology, engineering and mathematics to design and manufacture images and objects that enhance and contribute significantly to our daily lives.

Visual Art prepares students to engage in a multimodal, media-saturated world that is reliant on visual communication. Through the critical thinking and literacy skills essential to both artist and audience, learning in Visual Art empowers young people to be discriminating, and to engage with and make sense of what they see and experience.

A course of study in Visual Art can establish a basis for further education and employment in the fields of arts practice, design, craft, and information technologies, and more broadly, in creative industries, cultural institutions, advertising, administration and management, communication, education, public relations, health, research, science and technology.

Objectives

By the conclusion of the course of study, students will:

- implement ideas and representations
- apply literacy skills
- analyse and interpret visual language, expression and meaning in artworks and practices
- evaluate influences
- justify viewpoints
- experiment in response to stimulus
- create visual responses using knowledge and understanding of art media
- realise responses to communicate meaning.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Art as lens <ul style="list-style-type: none"> • Concept: lenses to explore the material world • Contexts: personal and contemporary • Focus: people, place, objects 	Art as code <ul style="list-style-type: none"> • Concept: art as a coded visual language • Contexts: formal and cultural • Focus: codes, symbols, signs and art conventions 	Art as knowledge <ul style="list-style-type: none"> • Concept: constructing knowledge as artist and audience • Contexts: contemporary, personal, cultural and/or formal • Focus: student-directed 	Art as alternate <ul style="list-style-type: none"> • Concept: evolving alternate representations and meaning • Contexts: contemporary, personal, cultural and/or formal • Focus: student-directed

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete *four* summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Investigation — inquiry phase 1	20%	Summative internal assessment 3 (IA3): • Project — inquiry phase 3	30%
Summative internal assessment 2 (IA2): • Project — inquiry phase 2	25%		
Summative external assessment (EA): 25% • Examination — extended response			