



ST MARY'S
COLLEGE MARYBOROUGH



YEAR 11 / 12
CURRICULUM HANDBOOK
2023

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Principal's Welcome

Dear Year 10 Student

Earlier this year you were welcomed to your Senior Studies, and it is now time to consider what form your Queensland Certificate of Education (QCE) will take.

Year 11 is an exciting new phase of learning; it is usually a very different experience of school.

- Often you are in smaller classes,
- sometimes you will have the benefit of working with students in the year level above you,
- there is opportunity for individualisation of learning about what you are interested in,
- you can integrate other qualifications into your schooling,
- you are given more responsibility for your own learning and directing your pathway beyond your schooling years.

It is very common for people your age to have little idea about what you want to do when you finish school. If that is the case for you, it is good to keep your options open, and choose courses that:

- a) enable you to gain your QCE,
- b) enable you to receive an ATAR (Australian Tertiary Admission Rank) which is one of the main ways to enter a university course,
- c) consider a VET course which prepares you well for further training/studies and the workplace.

As you begin your journey toward selecting a future pathway for making a unique contribution to the world, we are here to provide information and support you. In addition to teachers and key people who will be sharing information with you, this document provides information on subjects and important contact information.

You will be selecting subjects for a two-year course. Regardless of QCEs, ATARS or VET certificates, if you engage wholeheartedly, you will get much out of your education, not just the credentials that accompany it.

All the best with your planning!

Ms Tameika Grist
Principal

Introduction

Subject Selection Process – SETPLAN

In Senior Schooling lessons during Year 10, students investigate their strengths and weaknesses, their talents and abilities in certain fields, and set goals for their future careers. They engage in Work Experience, meet with people from certain industries and visit universities, TAFEs and career expos so they can make informed decisions about their subject choices leading into Senior study. Subject Selection Evening is an opportunity to talk with teachers about subject offerings in Year 11 and 12. Senior teachers also engage with all Year 10 by giving short talks about each subject. SETPLAN interviews take place with students, parents and a member of staff to discuss the future goals of students such as graduating Year 12 with a QCE, career choices, tertiary courses, apprenticeships and lastly subject choices for Year 11 and 12 to help achieve these goals.

Senior study requires a commitment from students and assistance from their support networks. By reading through this guide and talking with people, students can make the best decisions for themselves for their future.

Brisbane Catholic Education School of Distance Education - FisherOne

From 2022, a Catholic School of Distance Education called FisherOne, underpinned by Catholic ethos, has been hosted by St John Fisher College. St Mary's College will be supporting students to study online if there is a subject that is required using this model. Subject offerings are listed in this handbook. FisherOne will be ensuring distance education offerings are taught using best practice for the online environment.



IMPORTANT CONTACTS

Your teachers and Careers/Pathways Advisors are your best resources for information. You should never choose a subject without knowing its demands in terms of content and assessment. To assist you in your decision-making, refer to the list of contacts below.

Role	Name	Email
Assistant Principal Curriculum	Denise Newman	dmnewman@bne.catholic.edu.au
Assistant Principal Religious Education	Amy Brennan	abrennan@bne.catholic.edu.au
Guidance Counsellors	Anita Uden/Sarah Padbury	auden@bne.catholic.edu.au spadbury@bne.catholic.edu.au
Head of Learning and Teaching – Senior Years (Years 10, 11 & 12)	Mark Sealey	msealey@bne.catholic.edu.au
Head of Learning and Teaching – Middle Years (Years 7, 9 & 9)	Dane Ponting	dponting@bne.catholic.edu.au
Learning and Teaching Leader (English, Language, Humanities)	Glenys Nash	gnash@bne.catholic.edu.au
Learning and Teaching Leader (Design, Arts, PE)	Jonathan Canning	jcanning@bne.catholic.edu.au
Learning and Teacher Leader (Maths, Science)	Krissy Lourigan	klourigan@bne.catholic.edu.au
Year 11 and 12 Teachers		

Senior Education Profile

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

- statement of results
- 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-qualifications/sep.

Statement of results

Students are issued with a statement of results in the December following the completion of a QCAA-developed course of study. A new statement of results is issued to students after each QCAA-developed course of study is completed.

A full record of study will be issued, along with the QCE qualification, in the first December or July after the student meets the requirements for a QCE.

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.

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 four types of senior subject syllabuses - General, Applied, Senior External Examinations and Short Courses. Results in General and Applied 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.

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

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.

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 subjects include Extension subjects.

Applied 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.

Senior External Examination

The Senior External Examination consists of individual subject examinations provided across Queensland in October and November each year by the QCAA.

Short Courses

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. They are informed by, and articulate closely with, the requirements of the Australian Core Skills Framework (ACSF). A grade of C in Short Courses aligns with the requirements for ACSF Level 3.

For more information about the ACSF see: <https://www.education.gov.au/australian-core-skills-framework>.

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.

General syllabuses and Short Courses

In addition to literacy and numeracy, General syllabuses and Short Courses 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 information & communication technologies (ICT) skills.

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
- core skills for work — the set of knowledge, understanding and non-technical skills that underpin successful participation in work.

Vocational education and training (VET)

Students can access VET programs through the school if it:

- is a registered training organisation (RTO)
- has a third-party arrangement with an external provider who is an RTO
- offers opportunities for students to undertake school-based apprenticeships or traineeships.

Australian Tertiary Admission Rank (ATAR) eligibility

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

- best five 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 Sound 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

Structure

The syllabus structure consists of a course overview and assessment.

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.

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.

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.

Applied and Applied (Essential) syllabuses

Structure

The syllabus structure consists of a course overview and assessment.

Course overview

Applied syllabuses are developmental four-unit courses of study.

Units 1 and 2 of the course are designed to allow students to begin their engagement with the course content, i.e. the knowledge, understanding and skills of the subject. Course content, learning experiences and assessment increase in complexity across the four units as students develop greater independence as learners.

Units 3 and 4 consolidate student learning. Results from assessment in Applied subjects contribute to the award of a QCE and results from Units 3 and 4 may contribute as a single input to ATAR calculation.

A course of study for Applied syllabuses includes core topics and elective areas for study.

Assessment

Applied syllabuses use *four* summative internal assessments from Units 3 and 4 to determine a student's exit result.

Schools should develop at least *two* but no more than *four* internal assessments for Units 1 and 2 and these assessments should provide students with opportunities to become familiar with the summative internal assessment techniques to be used for Units 3 and 4.

Applied syllabuses do not use external assessment.

Instrument-specific standards matrixes

For each assessment instrument, schools develop an instrument-specific standards matrix by selecting the syllabus standards descriptors relevant to the task and the dimension/s being assessed. The matrix is shared with students and used as a tool for making judgments about the quality of students' responses to the instrument. Schools develop assessments to allow students to demonstrate the range of standards.

Essential English and Essential Mathematics — Common internal assessment

Students complete a total of *four* summative internal assessments in Units 3 and 4 that count toward their overall subject result. Schools develop *three* of the summative internal assessments for each senior subject and the other summative assessment is a common internal assessment (CIA) developed by the QCAA.

The CIA for Essential English and Essential Mathematics is based on the learning described in Unit 3 of the respective syllabus. The CIA is:

- developed by the QCAA
- common to all schools
- delivered to schools by the QCAA
- administered flexibly in Unit 3
- administered under supervised conditions
- marked by the school according to a common marking scheme developed by the QCAA.

The CIA is not privileged over the other summative internal assessment.



Summative internal assessment — instrument-specific standards

The Essential English and Essential Mathematics syllabuses provide instrument-specific standards for the three summative internal assessments in Units 3 and 4.

The instrument-specific standards 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.

Senior External Examinations

Senior External Examinations course overview

A Senior External Examination syllabus sets out the aims, objectives, learning experiences and assessment requirements for each of these subjects.

Results are based solely on students' demonstrated achievement in examinations. Work undertaken before an examination is not assessed.

The Senior External Examination is for:

- low candidature subjects not otherwise offered as a General subject in Queensland
- students in their final year of senior schooling who are unable to access particular subjects at their school
- adult students (people of any age not enrolled at a Queensland secondary school)
 - to meet tertiary entrance or employment requirements
 - for personal interest.

Senior External Examination results may contribute credit to the award of a QCE and contribute to ATAR calculations.

For more information about the Senior External Examination, see: www.qcaa.qld.edu.au/senior/see.

Assessment

The Senior External Examination consists of individual subject examinations that are held once each year in Term 4. Important dates and the examination timetable are published in the Senior Education Profile (SEP) calendar, available at: <https://www.qcaa.qld.edu.au/senior/sep-calendar>.

Results are based solely on students' demonstrated achievement in the examinations. Work undertaken before an examination is not assessed. Results are reported as a mark and grade of A–E. For more information about results, see the QCE and QCIA policy and procedures handbook, Section 10.

- Aboriginal and Torres Strait Islander Languages
- Career Education.

Senior syllabuses* - St Mary's College

Mathematics

General

General Mathematics
Mathematical Methods
Specialist Mathematics**

Applied

Essential Mathematics

Technologies

Applied

Industrial Graphic Skills*
Industrial Technology
Skills*

See BCE School of
Distant Education
See below

Languages

General

Japanese**

English

General

English

Applied

Essential English

Health and Physical Education

General

Physical Education*

The Arts

General

Drama*
Film, Television & New Media*
Music**
Visual Art

Humanities

General

Ancient/Modern History**
Business**
Geography*
Legal Studies
Study of Religion

Applied

Religion & Ethics
Religion Meaning of Life***

Science

General

Biology
Chemistry
Physics**
Psychology*

Applied

Aquatic Practices

VET OPTIONS

(See Separate VET Courses Handbook)

Certificate III in Hospitality/Tourism (Certificate II Course embedded into program)
Certificate III in Sport and Recreation (Certificate II embedded into program)
Certificate III in Early Childhood Education and Care
Certificate IV in Justice Studies
Certificate III in Information, Digital Media and Technology
Certificate III in Visual Art
Certificate II in Sampling & Measurement /
Certificate III Laboratory Skills

Other courses available at:

TAFE
MSHS
SBT/SBA
OTHER RTO

BSDE

Variety of online subjects available – conditions apply – see BSDE website

Brisbane Catholic Education, School of Distant Education**

Hosted by
FisherOne

Ancient History
Modern History
Business
Japanese
Design
Digital Solutions
Music
Physics
Specialist Maths

*Some of these subjects running will be subject to meeting a minimum number of students.

**Students may enrol in these online courses if not available at the college due to not being offered or class not running due to low numbers.

***Not a QCE subject, by school approval only.

Students will need to have demonstrated the skill of learning independently as they will have a combination of online lessons and individual learning time. Online lesson times to be announced at beginning of school year. Could be before or after school hours.



General Mathematics

General senior subject

General

General Mathematics' major domains are Number and algebra, Measurement and geometry, Statistics, and Networks and matrices, building on the content of the P–10 Australian Curriculum.

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.

Students build on and develop 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.

Students engage in a practical approach that equips learners for their needs as future citizens. They learn to ask appropriate questions, map out pathways, reason about complex solutions, set up models and communicate in different forms. They experience the relevance of mathematics to their daily lives, communities and cultural backgrounds. They develop the ability to understand, analyse and take action regarding social issues in their world.

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:

- select, recall and use facts, rules, definitions and procedures drawn from Number and algebra, Measurement and geometry, Statistics, and Networks and matrices
- comprehend mathematical concepts and techniques drawn from Number and algebra, Measurement and geometry, Statistics, and Networks and matrices
- communicate using mathematical, statistical and everyday language and conventions
- evaluate the reasonableness of solutions
- justify procedures and decisions by explaining mathematical reasoning
- solve problems by applying mathematical concepts and techniques drawn from Number and algebra, Measurement and geometry, Statistics, and Networks and matrices.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Money, measurement and relations <ul style="list-style-type: none"> • Consumer arithmetic • Shape and measurement • Linear equations and their graphs 	Applied trigonometry, algebra, matrices and univariate data <ul style="list-style-type: none"> • Applications of trigonometry • Algebra and matrices • Univariate data analysis 	Bivariate data, sequences and change, and Earth geometry <ul style="list-style-type: none"> • Bivariate data analysis • 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 • Graphs and networks • Networks and decision mathematics

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): • Problem-solving and modelling task	20%	Summative internal assessment 3 (IA3): • Examination	15%
Summative internal assessment 2 (IA2): • Examination	15%		
Summative external assessment (EA): 50% • Examination			

Mathematical Methods

General senior subject

General

Mathematical Methods' major domains are Algebra, Functions, relations and their graphs, Calculus and Statistics.

Mathematical Methods enables students to 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.

Students learn topics that 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.

Students develop the ability to translate written, numerical, algebraic, symbolic and graphical information from one representation to another. They make complex use of factual knowledge to successfully formulate, represent and solve mathematical problems.

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:

- select, recall and use facts, rules, definitions and procedures drawn from Algebra, Functions, relations and their graphs, Calculus and Statistics
- comprehend mathematical concepts and techniques drawn from Algebra, Functions, relations and their graphs, Calculus and Statistics
- communicate using mathematical, statistical and everyday language and conventions
- evaluate the reasonableness of solutions
- justify procedures and decisions by explaining mathematical reasoning
- solve problems by applying mathematical concepts and techniques drawn from Algebra, Functions, relations and their graphs, Calculus and Statistics.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Algebra, statistics and functions <ul style="list-style-type: none"> • Arithmetic and geometric sequences and series 1 • Functions and graphs • Counting and probability • Exponential functions 1 • Arithmetic and geometric sequences 	Calculus and further functions <ul style="list-style-type: none"> • Exponential functions 2 • The logarithmic function 1 • Trigonometric functions 1 • Introduction to differential calculus • Further differentiation and applications 1 • Discrete random variables 1 	Further calculus <ul style="list-style-type: none"> • The logarithmic function 2 • Further differentiation and applications 2 • Integrals 	Further functions and statistics <ul style="list-style-type: none"> • Further differentiation and applications 3 • Trigonometric functions 2 • Discrete random variables 2 • Continuous random variables and the normal distribution • 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): • Problem-solving and modelling task	20%	Summative internal assessment 3 (IA3): • Examination	15%
Summative internal assessment 2 (IA2): • Examination	15%		
Summative external assessment (EA): 50% • Examination			

Specialist Mathematics**

General senior subject

General

Specialist Mathematics' major domains are Vectors and matrices, Real and complex numbers, Trigonometry, Statistics and Calculus.

Specialist Mathematics is designed for students who 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.

Students learn topics that 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.

Student learning experiences range from practising essential mathematical routines to developing procedural fluency, through to investigating scenarios, modelling the real world, solving problems and explaining reasoning.

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:

- select, recall and use facts, rules, definitions and procedures drawn from Vectors and matrices, Real and complex numbers, Trigonometry, Statistics and Calculus
- comprehend mathematical concepts and techniques drawn from Vectors and matrices, Real and complex numbers, Trigonometry, Statistics and Calculus
- communicate using mathematical, statistical and everyday language and conventions
- evaluate the reasonableness of solutions
- justify procedures and decisions, and prove propositions by explaining mathematical reasoning
- solve problems by applying mathematical concepts and techniques drawn from Vectors and matrices, Real and complex numbers, Trigonometry, Statistics and Calculus.

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, vectors and proof <ul style="list-style-type: none"> • Combinatorics • Vectors in the plane • Introduction to proof 	Complex numbers, trigonometry, functions and matrices <ul style="list-style-type: none"> • Complex numbers 1 • Trigonometry and functions • Matrices 	Mathematical induction, and further vectors, matrices and complex numbers <ul style="list-style-type: none"> • Proof by mathematical induction • Vectors and matrices • Complex numbers 2 	Further statistical and calculus inference <ul style="list-style-type: none"> • Integration and applications of integration • Rates of change and differential equations • 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): • Problem-solving and modelling task	20%	Summative internal assessment 3 (IA3): • Examination	15%
Summative internal assessment 2 (IA2): • Examination	15%		
Summative external assessment (EA): 50% • Examination			

Essential Mathematics

Applied senior subject

Applied

Essential Mathematics' major domains are Number, Data, Location and time, Measurement and Finance.

Essential Mathematics benefits students because they develop skills that go beyond the traditional ideas of numeracy.

Students develop their conceptual understanding when they undertake tasks that require them to connect mathematical concepts, operations and relations. They learn to recognise definitions, rules and facts from everyday mathematics and data, and to calculate using appropriate mathematical processes.

Students interpret and use mathematics to make informed predictions and decisions about personal and financial priorities. This is achieved through an emphasis on estimation, problem-solving and reasoning, which develops students into thinking citizens.

Pathways

A course of study in Essential Mathematics can establish a basis for further education and employment in the fields of trade, industry, business and community services. Students learn within a practical context

related to general employment and successful participation in society, drawing on the mathematics used by various professional and industry groups.

Objectives

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

- select, recall and use facts, rules, definitions and procedures drawn from Number, Data, Location and time, Measurement and Finance
- comprehend mathematical concepts and techniques drawn from Number, Data, Location and time, Measurement and Finance
- communicate using mathematical, statistical and everyday language and conventions
- evaluate the reasonableness of solutions
- justify procedures and decisions by explaining mathematical reasoning
- solve problems by applying mathematical concepts and techniques drawn from Number, Data, Location and time, Measurement and Finance.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Number, data and graphs <ul style="list-style-type: none">• Fundamental topic: Calculations• Number• Representing data• Graphs	Money, travel and data <ul style="list-style-type: none">• Fundamental topic: Calculations• Managing money• Time and motion• Data collection	Measurement, scales and data <ul style="list-style-type: none">• Fundamental topic: Calculations• Measurement• Scales, plans and models• Summarising and comparing data	Graphs, chance and loans <ul style="list-style-type: none">• Fundamental topic: Calculations• Bivariate graphs• Probability and relative frequencies• Loans and compound interest

Assessment

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

In Units 3 and 4 students complete four summative assessments. Schools develop three summative internal assessments and the common internal assessment (CIA) is developed by the QCAA.

Summative assessments

Unit 3	Unit 4
Summative internal assessment 1 (IA1): <ul style="list-style-type: none">• Problem-solving and modelling task	Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• Problem-solving and modelling task
Summative internal assessment 2 (IA2): <ul style="list-style-type: none">• Common internal assessment (CIA)	Summative internal assessment (IA4): <ul style="list-style-type: none">• Examination

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 are offered opportunities to interpret and create texts for personal, cultural, social and aesthetic purposes. They learn how language varies according to context, purpose and audience, content, modes and mediums, and how to use it appropriately and effectively for a variety of purposes. Students have opportunities to engage with diverse texts to help them develop a sense of themselves, their world and their place in it.

Students communicate effectively in Standard Australian English for the purposes of responding to and creating texts. They 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. They explore how literary and non-literary texts shape perceptions of the world, and consider ways in which texts may reflect or challenge social and cultural ways of thinking and influence audiences.

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/signer/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"> Examining and creating perspectives in texts Responding to a variety of non-literary and literary texts Creating responses for public audiences and persuasive texts 	Texts and culture <ul style="list-style-type: none"> Examining and shaping representations of culture in texts Responding to literary and non-literary texts, including a focus on Australian texts Creating imaginative and analytical texts 	Textual connections <ul style="list-style-type: none"> Exploring connections between texts Examining different perspectives of the same issue in texts and shaping own perspectives Creating responses for public audiences and persuasive texts 	Close study of literary texts <ul style="list-style-type: none"> Engaging with literary texts from diverse times and places Responding to literary texts creatively and critically Creating imaginative and analytical 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): <ul style="list-style-type: none"> Extended response — written response for a public audience 	25%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none"> Extended response — imaginative written response 	25%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none"> Extended response — persuasive spoken response 	25%	Summative external assessment (EA): <ul style="list-style-type: none"> Examination — analytical written response 	25%

Essential English

Applied senior subject

Applied

Essential English develops and refines students' understanding of language, literature and literacy to enable them to interact confidently and effectively with others in everyday, community and social contexts. Students recognise language and texts as relevant in their lives now and in the future and learn to understand, accept or challenge the values and attitudes in these texts.

Students engage with language and texts to foster skills to communicate confidently and effectively in Standard Australian English in a variety of contemporary contexts and social situations, including everyday, social, community, further education and work-related contexts. They choose generic structures, language, language features and technologies to best convey meaning. They develop skills to read for meaning and purpose, and to use, critique and appreciate a range of contemporary literary and non-literary texts.

Students use language effectively to produce texts for a variety of purposes and audiences and engage creative and imaginative thinking to explore their own world and the worlds of others. They actively and critically interact with a range of texts, developing an awareness of how the language they engage with positions them and others.

Pathways

A course of study in Essential 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
- use appropriate roles and relationships with audiences
- construct and explain representations of identities, places, events and concepts
- make use of and explain the ways cultural assumptions, attitudes, values and beliefs underpin texts and influence meaning
- explain how language features and text structures shape meaning and invite particular responses
- select and use subject matter to support perspectives
- sequence subject matter and use mode-appropriate cohesive devices to construct coherent texts
- make mode-appropriate language choices according to register informed by purpose, audience and context
- use language features to achieve particular purposes across modes.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Language that works <ul style="list-style-type: none"> • Responding to a variety of texts used in and developed for a work context • Creating multimodal and written texts 	Texts and human experiences <ul style="list-style-type: none"> • Responding to reflective and nonfiction texts that explore human experiences • Creating spoken and written texts 	Language that influences <ul style="list-style-type: none"> • Creating and shaping perspectives on community, local and global issues in texts • Responding to texts that seek to influence audiences 	Representations and popular culture texts <ul style="list-style-type: none"> • Responding to popular culture texts • Creating representations of Australian identities, places, events and concepts

Assessment

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

In Units 3 and 4 students complete four summative assessments. Schools develop three summative internal assessments and the common internal assessment (CIA) is developed by the QCAA.

Summative assessments

Unit 3	Unit 4
Summative internal assessment 1 (IA1): <ul style="list-style-type: none"> • Extended response — spoken/signed response 	Summative internal assessment 3 (IA3): <ul style="list-style-type: none"> • Extended response — Multimodal response
Summative internal assessment 2 (IA2): <ul style="list-style-type: none"> • Common internal assessment (CIA) 	Summative internal assessment (IA4): <ul style="list-style-type: none"> • Extended response — Written response

Ancient History**

General senior subject

General

History provides opportunities for students to study people, societies and civilisations of the past, 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, and study the development of some features of modern society, such as social organisation, systems of law, governance and religion. the development of some features of modern society, such as social organisation, systems of law, governance and religion.

Students analyse and interpret archaeological and written evidence. They develop increasingly sophisticated skills and understandings of historical issues and problems by interrogating the surviving evidence of ancient sites, societies, individuals and significant historical periods. They investigate the problematic nature of evidence, pose increasingly complex questions about the past and formulate reasoned responses.

Students gain multi-disciplinary skills in analysing textual and visual sources, constructing arguments, challenging

assumptions, and thinking both creatively and critically.

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:

- comprehend terms, issues and concepts
- devise historical questions and conduct research
- analyse historical sources and evidence
- synthesise information from historical sources and evidence
- evaluate historical interpretations
- create responses that communicate meaning.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Investigating the ancient world <ul style="list-style-type: none"> • Digging up the past • Ancient societies — Slavery • Ancient societies — Art and architecture • Ancient societies — Weapons and warfare • Ancient societies — Technology and engineering 	Personalities in their time <ul style="list-style-type: none"> • Hatshepsut • Akhenaten • Xerxes • Perikles • Alexander the Great • Hannibal Barca • Cleopatra • Agrippina the Younger • Nero • Boudica 	Reconstructing the ancient world <ul style="list-style-type: none"> • Thebes — East and West, 18th Dynasty Egypt • The Bronze Age Aegean • Assyria from Tiglath Pileser III to the fall of the Empire • Fifth Century Athens (BCE) 	People, power and authority <p>Schools choose one study of power from:</p> <ul style="list-style-type: none"> • Ancient Egypt — New Kingdom Imperialism • Ancient Greece — the Persian Wars • Ancient Greece — the Peloponnesian War • Ancient Rome — the Punic Wars

Unit 1	Unit 2	Unit 3	Unit 4
<ul style="list-style-type: none"> • Ancient societies — The family • Ancient societies — Beliefs, rituals and funerary practices. 	<ul style="list-style-type: none"> • Cao Cao • Saladin (An-Nasir Salah ad-Din Yusuf ibn Ayyub) • Richard the Lionheart • Alternative choice of personality 	<ul style="list-style-type: none"> • Philip II and Alexander III of Macedon • Early Imperial Rome • Pompeii and Herculaneum • Later Han Dynasty and the Three Kingdoms • The 'Fall' of the Western Roman Empire • The Medieval Crusades 	<ul style="list-style-type: none"> • Ancient Rome — Civil War and the breakdown of the Republic <p>QCAA will nominate one topic that will be the basis for an external examination from:</p> <ul style="list-style-type: none"> • Thutmose III • Rameses II • Themistokles • Alkibiades • Scipio Africanus • Caesar • Augustus

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 — essay in response to historical sources	25%	Summative internal assessment 3 (IA3): • Investigation — historical essay based on research	25%
Summative internal assessment 2 (IA2): • Independent source investigation	25%	Summative external assessment (EA): • Examination — short responses to historical sources	25%

Business**

General senior subject

General

Business provides opportunities for students to develop business knowledge and skills to contribute meaningfully to society, the workforce and the marketplace and prepares them as potential employees, employers, leaders, managers and entrepreneurs.

Students investigate the business life cycle, develop skills in examining business data and information and learn business concepts, theories, processes and strategies relevant to leadership, management and entrepreneurship. They investigate the influence of, and implications for, strategic development in the functional areas of finance, human resources, marketing and operations.

Students use a variety of technological, communication and analytical tools to comprehend, analyse, interpret and synthesise business data and information. They engage with the dynamic business world (in both national and global contexts), the changing workforce and emerging digital technologies.

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 environments and situations
- explain business concepts, strategies and processes
- select and analyse business data and information
- interpret business relationships, patterns and trends to draw conclusions
- evaluate business practices and strategies to make decisions and propose recommendations
- create responses that communicate meaning to suit purpose and audience.

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

Geography focuses on the significance of 'place' and 'space' in understanding our world. 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 investigate places in Australia and across the globe to observe and measure spatial, environmental, economic, political, social and cultural factors. They interpret global concerns and challenges including responding to risk in hazard zones, planning sustainable places, managing land cover transformations and planning for population change. They develop an understanding of the complexities involved in sustainable planning and management practices.

Students observe, gather, organise, analyse and present data and information across a range of scales. They engage in real-world applications of geographical skills and thinking, including the collection and representation of data.

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 the 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): • Examination — combination response	25%	Summative internal assessment 3 (IA3): • Investigation — data report	25%
Summative internal assessment 2 (IA2): • Investigation — field report	25%	Summative external assessment (EA): • Examination — combination response	25%

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
- synthesise information from the analysis to propose action
- communicate geographical understanding.

Legal Studies focuses on the interaction between society and the discipline of law and explores the role and development of law in response to current issues. 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.

Students study the foundations of law, the criminal justice process and the civil justice system. They critically examine issues of governance, explore contemporary issues of law reform and change, and consider Australian and international human rights issues.

Students develop skills of inquiry, critical thinking, problem-solving and reasoning to make informed and ethical decisions and recommendations. They identify and describe legal issues, explore information and data, analyse, evaluate to make decisions or propose recommendations, and create responses that convey legal meaning. They question, explore and discuss tensions between changing social values, justice and equitable outcomes.

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.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
<p>Beyond reasonable doubt</p> <ul style="list-style-type: none"> • Legal foundations • Criminal investigation process • Criminal trial process • Punishment and sentencing 	<p>Balance of probabilities</p> <ul style="list-style-type: none"> • Civil law foundations • Contractual obligations • Negligence and the duty of care 	<p>Law, governance and change</p> <ul style="list-style-type: none"> • Governance in Australia • Law reform within a dynamic society 	<p>Human rights in legal contexts</p> <ul style="list-style-type: none"> • Human rights • The effectiveness of international law • 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): <ul style="list-style-type: none">• Examination — combination response	25%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• Investigation — argumentative essay	25%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none">• Investigation — inquiry report	25%	Summative external assessment (EA): <ul style="list-style-type: none">• Examination — combination response	25%

Study of Religion

General senior subject

General

Study of Religion investigates religious traditions and how religion has influenced, and continues to influence, people's lives. Students become aware of their own religious beliefs, the religious beliefs of others, and how people holding such beliefs are able to co-exist in a pluralist society.

Students study the five major world religions of Judaism, Christianity, Islam, Hinduism and Buddhism; and Australian Aboriginal spiritualities and Torres Strait Islander religion and their influence on people, society and culture. These are explored through sacred texts and religious writings that offer insights into life, and through the rituals that mark significant moments and events in the religion itself and the lives of adherents.

Students develop a logical and critical approach to understanding the influence of religion, with judgments supported through valid and reasoned argument. They develop critical thinking skills, including those of analysis, reasoning and evaluation, as well as communication skills that support further study and post-school participation in a wide range of fields.

Pathways

A course of study in Study of Religion can establish a basis for further education and employment in such fields as anthropology, the arts, education, journalism, politics, psychology, religious studies, sociology and social work.

Objectives

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

- describe the characteristics of religion and religious traditions
- demonstrate an understanding of religious traditions
- differentiate between religious traditions
- analyse perspectives about religious expressions within traditions
- consider and organise information about religion
- evaluate and draw conclusions about the significance of religion for individuals and its influence on people, society and culture
- create responses that communicate meaning to suit purpose.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Sacred texts and religious writings <ul style="list-style-type: none"> • Sacred texts • Abrahamic traditions 	Religion and ritual <ul style="list-style-type: none"> • Lifecycle rituals • Calendrical rituals 	Religious ethics <ul style="list-style-type: none"> • Social ethics • Ethical relationships 	Religion, rights and the nation-state <ul style="list-style-type: none"> • Religion and the nation-state • Religion and human rights

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 — extended response	25%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• Investigation — inquiry response	25%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none">• Investigation — inquiry response	25%	Summative external assessment (EA): <ul style="list-style-type: none">• Examination — short response	25%

Religion & Ethics focuses on the personal, relational and spiritual perspectives of human experience. Students investigate and critically reflect on the role and function of religion and ethics in society.

Students investigate topics such as the meaning of life, spirituality, purpose and destiny, life choices, moral and ethical issues and justice and explore how these are dealt with in various religious, spiritual and ethical traditions. They examine how personal beliefs, values and spiritual identity are shaped and influenced by factors such as family, culture, gender, race, class and economic issues.

Students gain knowledge and understanding and develop the ability to think critically and communicate concepts relevant to their lives and the world in which they live.

Pathways

A course of study in Religion & Ethics can establish a basis for further education and employment in any field. Students gain skills and attitudes that contribute to lifelong learning and the basis for engaging with others in diverse settings.

Structure

The Religion & Ethics course is designed around core and elective topics. Each perspective of the core must be covered within every elective topic and integrated throughout the course.

Core topics	Elective topics	
<ul style="list-style-type: none"> • Who am I? the personal perspective • Who are we? the relational perspective • Is there more than this? the spiritual perspective 	<ul style="list-style-type: none"> • The Australian scene • Ethics and morality • Good and evil • Heroes and role models • Indigenous Australian spiritualities • Meaning and purpose 	<ul style="list-style-type: none"> • Peace and conflict • Religion and contemporary culture • Religions of the world • Religious citizenship • Sacred stories • Social justice • Spirituality

Objectives

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

- recognise and describe concepts, ideas and terminology about religion, beliefs and ethics
- identify and explain the ways religion, beliefs and ethics contribute to the personal, relational and spiritual perspectives of life and society
- explain viewpoints and practices related to religion, beliefs and ethics
- organise information and material related to religion, beliefs and ethics
- analyse perspectives, viewpoints and practices related to religion, beliefs and ethics
- apply concepts and ideas to make decisions about inquiries
- use language conventions and features to communicate ideas and information, according to purposes
- plan and undertake inquiries about religion, beliefs and ethics
- appraise inquiry processes and the outcomes of inquiries.

Assessment

For Religion and Ethics, assessment from Units 3 and 4 is used to determine the student's exit result, and consists of four instruments from at least three different assessment techniques, including:

- one project or investigation
- one examination
- no more than two assessments from each technique.

Project	Investigation	Extended response	Examination
A response to a single task, situation and/or scenario.	A response that includes locating and using information beyond students' own knowledge and the data they have been given.	A technique that assesses the interpretation, analysis/examination and/or evaluation of ideas and information in provided stimulus materials.	A response that answers a number of provided questions, scenarios and/or problems.
<p>At least two different components from the following:</p> <ul style="list-style-type: none"> • written: 500–900 words • spoken: 2½–3½ minutes • multimodal: 3–6 minutes • performance: continuous class time • product: continuous class time. 	<p>Presented in one of the following modes:</p> <ul style="list-style-type: none"> • written: 600–1000 words • spoken: 3–4 minutes • multimodal: 4–7 minutes. 	<p>Presented in one of the following modes:</p> <ul style="list-style-type: none"> • written: 600–1000 words • spoken: 3–4 minutes • multimodal: 4–7 minutes. 	<ul style="list-style-type: none"> • 60–90 minutes • 50–250 words per item on the test

Religion Meaning and Life (RML)***

School-based senior subject

RML is an alternative religion subject that can be studied in the senior years, instead of Study of Religion (SOR) or Religion and Ethics (R&E).

RML is a non-accredited option approved by Archbishop Mark Coleridge for use in Catholic schools. This means that students **do not** receive any QCE points for completing the subject.

It has been designed to be no more difficult in content than the R&E course but is a

more flexible option with no formal assessment. There must be evidence however of student learning, which is demonstrated through the completion of OneNote activities. It is aimed at reducing stress for students wishing to focus on other academic subjects and to assist with students not coping with the demands of Senior schooling.

The course consists of 4 units of work (2 per year). The delivery of this course is different to traditional subjects with 3 delivery modes as follows:-

1. 10 x 1hr timetabled lessons a term; plus
2. One other hour per week of "flexible" learning in the students' own time; plus
3. Five hours over each term of service/experiential learning. This can be timetabled as half an hour a week OR completed in the students' own time.

Students need to be able to show they can work independently to enrol in this subject. If students enrol in this subject but do not fulfil the work requirements of the subject, they will be required to change into an alternative religion subject. Accordingly, this will be discussed during the student's SETPLAN interview and intending students must be able to demonstrate evidence that the student can complete self-directed learning to be considered.

*****Not a QCE subject, by school approval only.**

Brisbane Catholic Education, School of Distant Education Offerings – FisherOne

In addition to subjects advertised in the St Mary's College section, the following subjects are on the pages following:

- Modern History
- Design
- Digital Solutions

BSDE – Brisbane School of Distance Education

A range of subjects are available through online study. These are subject to an application process to the online school and extra costs above St Mary's College fee structure. Students who are interested are to see the Assistant Principal to discuss further. Further information can be found at the website brisbanesde.eq.edu.au

Modern History

General senior subject

General

Modern History provides opportunities for students to gain historical knowledge and understanding about some of the main forces that have contributed to the development of the Modern World and to think historically and form a historical consciousness in relation to these same forces.

Modern History enables students to empathise with others and make meaningful connections between the past, present and possible futures.

Students learn that the past is contestable and tentative. Through inquiry into ideas, movements, national experiences and international experiences they discover how the past consists of various perspectives and interpretations.

Students gain a range of transferable skills that will help them 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:

- comprehend terms, concepts and issues
- devise historical questions and conduct research
- analyse evidence from historical sources to show understanding
- synthesise evidence from historical sources to form a historical argument
- evaluate evidence from historical sources to make judgments
- create responses that communicate meaning to suit purpose.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
<p>Ideas in the modern world</p> <ul style="list-style-type: none"> • Australian Frontier Wars, 1788–1930s • Age of Enlightenment, 1750s–1789 • Industrial Revolution, 1760s–1890s • American Revolution, 1763–1783 • French Revolution, 1789–1799 	<p>Movements in the modern world</p> <ul style="list-style-type: none"> • Australian Indigenous rights movement since 1967 • Independence movement in India, 1857–1947 • Workers' movement since the 1860s • Women's movement since 1893 • May Fourth Movement in China, 1919 	<p>National experiences in the modern world</p> <ul style="list-style-type: none"> • Australia, 1914–1949 • England, 1756–1837 • France, 1799–1815 • New Zealand, 1841–1934 • Germany, 1914–1945 • United States of America, 1917–1945 • Soviet Union, 1920s–1945 • Japan, 1931–1967 • China, 1931–1976 	<p>International experiences in the modern world</p> <ul style="list-style-type: none"> • Australian engagement with Asia since 1945 • Search for collective peace and security since 1815 • Trade and commerce between nations since 1833 • Mass migrations since 1848 • Information Age since 1936

Unit 1	Unit 2	Unit 3	Unit 4
<ul style="list-style-type: none"> • Age of Imperialism, 1848–1914 • Meiji Restoration, 1868–1912 	<ul style="list-style-type: none"> • Independence movement in Algeria, 1945–1962 	<ul style="list-style-type: none"> • Indonesia, 1942–1975 • India, 1947–1974 • Israel, 1948–1993 	<ul style="list-style-type: none"> • Genocides and ethnic cleansings since the 1930s • Nuclear Age since 1945 • Cold War, 1945–1991
<ul style="list-style-type: none"> • Boxer Rebellion, 1900–1901 • Russian Revolution, 1905–1920s • Xinhai Revolution, 1911–1912 • Iranian Revolution, 1977–1979 • Arab Spring since 2010 • Alternative topic for Unit 1 	<ul style="list-style-type: none"> • Independence movement in Vietnam, 1945–1975 • Anti-apartheid movement in South Africa, 1948–1991 • African-American civil rights movement, 1954–1968 • Environmental movement since the 1960s • LGBTIQ civil rights movement since 1969 • Pro-democracy movement in Myanmar (Burma) since 1988 • Alternative topic for Unit 2 	<ul style="list-style-type: none"> • South Korea, 1948–1972 	<ul style="list-style-type: none"> • Struggle for peace in the Middle East since 1948 • Cultural globalisation since 1956 • Space exploration since 1957 • Rights and recognition of First Peoples since 1982 • Terrorism, anti-terrorism and counter-terrorism since 1984

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 — essay in response to historical sources	25%	Summative internal assessment 3 (IA3): • Investigation — historical essay based on research	25%
Summative internal assessment 2 (IA2): • Investigation — independent source investigation	25%	Summative external assessment (EA): • Examination — short responses to historical sources	25%

Design

General senior subject

General

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

Students learn how design has influenced the economic, social and cultural environment in which they live. They understand the agency of humans in conceiving and imagining possible futures through design. Collaboration, teamwork and communication are crucial skills needed to work in design teams and liaise with stakeholders. They 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.

Students learn about and experience design through exploring needs, wants and opportunities; developing ideas and design concepts; using drawing and low-fidelity prototyping skills; and evaluating ideas and design concepts. They communicate design proposals to suit different audiences.

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 drawing and low-fidelity prototyping
- analyse needs, wants and opportunities using data
- devise ideas in response to design problems
- synthesise ideas and design information to propose design concepts
- evaluate ideas and design concepts to make refinements
- 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
Design in practice <ul style="list-style-type: none"> • Experiencing design • Design process • Design styles 	Commercial design <ul style="list-style-type: none"> • Explore — client needs and wants • Develop — collaborative design 	Human-centred design <ul style="list-style-type: none"> • Designing with empathy 	Sustainable design <ul style="list-style-type: none"> • Explore — sustainable design opportunities • Develop — redesign

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 — design challenge	15%	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	35%	Summative external assessment (EA): <ul style="list-style-type: none">• Examination — design challenge	25%

Digital Solutions enables students to learn about algorithms, computer languages and user interfaces through generating digital solutions to problems. Students engage with data, information and applications to create digital solutions that filter and present data in timely and efficient ways while understanding the need to encrypt and protect data. They understand computing's personal, local and global impact, and the issues associated with the ethical integration of technology into our daily lives.

Students use problem-based learning to write computer programs to create digital solutions that: use data; require interactions with users and within systems; and affect people, the economy and environments. They develop solutions using combinations of readily available hardware and software development environments, code libraries or specific instructions provided through programming.

Students create, construct and repurpose solutions that are relevant in a world where data and digital realms are transforming entertainment, education, business, manufacturing and many other industries.

Pathways

A course of study in Digital Solutions can establish a basis for further education and employment in the fields of science, technologies, engineering and mathematics.

Objectives

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

- recognise and describe elements, components, principles and processes
- symbolise and explain information, ideas and interrelationships
- analyse problems and information
- determine solution requirements and criteria
- synthesise information and ideas to determine possible digital solutions
- generate components of the digital solution
- evaluate impacts, components and solutions against criteria to make refinements and 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
Creating with code <ul style="list-style-type: none"> • Understanding digital problems • User experiences and interfaces • Algorithms and programming techniques • Programmed solutions 	Application and data solutions <ul style="list-style-type: none"> • Data-driven problems and solution requirements • Data and programming techniques • Prototype data solutions 	Digital innovation <ul style="list-style-type: none"> • Interactions between users, data and digital systems • Real-world problems and solution requirements • Innovative digital solutions 	Digital impacts <ul style="list-style-type: none"> • Digital methods for exchanging data • Complex digital data exchange problems and solution requirements • Prototype digital data exchanges

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 — technical proposal	20%	Summative internal assessment 3 (IA3): • Project — folio	25%
Summative internal assessment 2 (IA2): • Project — digital solution	30%	Summative external assessment (EA): • Examination	25%

Industrial Graphics Skills*

Applied senior subject

General

Industrial Graphics Skills focuses on the underpinning industry practices and production processes required to produce the technical drawings used in a variety of industries, including building and construction, engineering and furnishing.

Students understand industry practices, interpret technical information and drawings, demonstrate and apply safe practical modelling procedures with tools and materials, communicate using oral and written modes, organise and produce technical drawings and evaluate drawings using specifications.

Students develop transferable skills by engaging in drafting and modelling tasks that relate to business and industry, and that promote adaptable, competent, self-motivated and safe individuals who can work with colleagues to solve problems and complete tasks.

Pathways

A course of study in Industrial Graphics Skills can establish a basis for further education and employment in a range of roles and trades in the manufacturing industries. With additional training and experience, potential employment

opportunities may be found in drafting roles such as architectural drafter, estimator, mechanical drafter, electrical drafter, structural drafter, civil drafter and survey drafter.

Objectives

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

- describe industry practices in drafting and modelling tasks
- demonstrate fundamental drawing skills
- interpret drawings and technical information
- analyse drafting tasks to organise information
- select and apply drawing skills and procedures in drafting tasks
- use language conventions and features to communicate for particular purposes
- construct models from drawings
- create technical drawings from industry requirements
- evaluate industry practices, drafting processes and drawings, and make recommendations.

Structure

The Industrial Graphics Skills course is designed around core and elective topics.

Core topics	Elective topics
<ul style="list-style-type: none"> • Industry practices • Drafting processes 	<ul style="list-style-type: none"> • Building and construction drafting • Engineering drafting • Furnishing drafting

Assessment

For Industrial Graphic Skills, assessment from Units 3 and 4 is used to determine the student's exit result, and consists of *four* instruments, including:

- at least two projects
- at least one practical demonstration (separate to the assessable component of a project).

Project	Practical demonstration	Examination
A response to a single task, situation and/or scenario.	A task that assesses the practical application of a specific set of teacher-identified production skills and procedures.	A response that answers a number of provided questions, scenarios and/or problems.
<p>A project consists of a technical drawing (which includes a model) component and at least one of the following components:</p> <ul style="list-style-type: none"> • written: 500–900 words • spoken: 2½–3½ minutes • multimodal <ul style="list-style-type: none"> – non-presentation: 8 A4 pages max (or equivalent) – presentation: 3-6 minutes • product: continuous class time. 	Students demonstrate production skills and procedures in class under teacher supervision.	<ul style="list-style-type: none"> • 60–90 minutes • 50–250 words per item

Industrial Technology Skills*

Applied senior subject

General

Industrial Technology Skills focuses on the practices and processes required to manufacture products in a variety of industries.

Students understand industry practices; interpret specifications, including technical information and drawings; demonstrate and apply safe, practical production processes with hand/power tools and machinery; communicate using oral, written and graphical modes; organise, calculate and plan production processes; and evaluate the products they create using predefined specifications.

Students develop transferable skills by engaging in manufacturing tasks that relate to business and industry, and that promote adaptable, competent, self-motivated and safe individuals who can work with colleagues to solve problems and complete practical work.

Pathways

A course of study in Industrial Technology Skills can establish a basis for further education and employment in manufacturing industries. Employment opportunities may be found in the industry areas of aeroskills,

automotive, building and construction, engineering, furnishing, industrial graphics and plastics.

Objectives

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

- describe industry practices in manufacturing tasks
- demonstrate fundamental production skills
- interpret drawings and technical information
- analyse manufacturing tasks to organise materials and resources
- select and apply production skills and procedures in manufacturing tasks
- use visual representations and language conventions and features to communicate for particular purposes
- plan and adapt production processes
- create products from specifications
- evaluate industry practices, production processes and products, and make recommendations.

Structure

The Industrial Technology Skills course is designed around:

- core topics, which are integrated throughout the course
- elective topics, organised in industry areas, and manufacturing tasks related to the chosen electives.

Core topics	Industry area	Elective topics
<ul style="list-style-type: none">• Industry practices• Production processes	Aeroskills	<ul style="list-style-type: none">• Aeroskills mechanical• Aeroskills structures
	Automotive	<ul style="list-style-type: none">• Automotive mechanical• Automotive body repair• Automotive electrical

	Building and construction	<ul style="list-style-type: none"> • Bricklaying • Plastering and painting • Concreting • Carpentry • Tiling • Landscaping
	Engineering	<ul style="list-style-type: none"> • Sheet metal working • Welding and fabrication • Fitting and machining
	Furnishing	<ul style="list-style-type: none"> • Cabinet-making • Furniture finishing • Furniture-making • Glazing and framing • Upholstery
	Industrial graphics	<ul style="list-style-type: none"> • Engineering drafting • Building and construction drafting • Furnishing drafting
	Plastics	<ul style="list-style-type: none"> • Thermoplastics fabrication • Thermosetting fabrication

Assessment

For Industrial Technology Skills, assessment from Units 3 and 4 is used to determine the student's exit result, and this consists of *four* instruments, including:

- at least two projects
- at least one practical demonstration (separate to the assessable component of a project).

Project	Practical demonstration	Examination
A response to a single task, situation and/or scenario.	A task that assesses the practical application of a specific set of teacher-identified production skills and procedures.	A response that answers a number of provided questions, scenarios and/or problems.
<p>A project consists of a product component and at least one of the following components:</p> <ul style="list-style-type: none"> • written: 500–900 words • spoken: 2½–3½ minutes • multimodal <ul style="list-style-type: none"> – non-presentation: 8 A4 pages max (or equivalent) – presentation: 3–6 minutes • product: continuous class time. 	Students demonstrate production skills and procedures in class under teacher supervision.	<ul style="list-style-type: none"> • 60–90 minutes • 50–250 words per item

Physical Education*

General senior subject

General

Physical Education provides students with knowledge, understanding and skills to explore and enhance their own and others' health and physical activity in diverse and changing contexts.

Physical Education provides a philosophical and educative framework to promote deep learning in three dimensions: about, through and in physical activity contexts. Students optimise their engagement and performance in physical activity as they develop an understanding and appreciation of the interconnectedness of these dimensions.

Students learn how body and movement concepts and the scientific bases of biophysical, sociocultural and psychological concepts and principles are relevant to their engagement and performance in physical activity. They engage in a range of activities to develop movement sequences and movement strategies.

Students learn experientially through three stages of an inquiry approach to make connections between the scientific bases and the physical activity contexts. They 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 engagement in physical activities, students gather data to analyse, synthesise and devise strategies to optimise engagement and performance. They engage in reflective decision-making as they evaluate and justify strategies to achieve a particular outcome.

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, biomechanics and physical activity <ul style="list-style-type: none"> • Motor learning integrated with a selected physical activity • Functional anatomy and biomechanics integrated with a selected physical activity 	Sport psychology, equity and physical activity <ul style="list-style-type: none"> • Sport psychology integrated with a selected physical activity • Equity — barriers and enablers 	Tactical awareness, ethics and integrity and physical activity <ul style="list-style-type: none"> • Tactical awareness integrated with one selected 'Invasion' or 'Net and court' physical activity • Ethics and integrity 	Energy, fitness and training and physical activity <ul style="list-style-type: none"> • Energy, fitness and training integrated with one selected 'Invasion', 'Net and court' or 'Performance' 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	30%
Summative internal assessment 2 (IA2): • Investigation — report	20%	Summative external assessment (EA): • Examination — combination response	25%

Biology

General senior subject

General

Biology provides opportunities for students to engage with living systems.

Students develop their understanding of cells and multicellular organisms. They engage with the concept of maintaining the internal environment. They study biodiversity and the interconnectedness of life. This knowledge is linked with the concepts of heredity and the continuity of life.

Students learn and apply aspects of the knowledge and skills of the discipline (thinking, experimentation, problem-solving and research skills), understand how it works and how it may impact society. They develop their sense of wonder and curiosity about life; respect for all living things and the environment; understanding of biological systems, concepts, theories and models; appreciation of how biological knowledge has developed over time and continues to develop; a sense of how biological knowledge influences society.

Students plan and carry out fieldwork, laboratory and other research investigations; interpret evidence; use sound, evidence-based arguments creatively and analytically when evaluating claims and applying biological knowledge; and 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 and explain scientific concepts, theories, models and systems and their limitations
- apply understanding of scientific concepts, theories, models and systems within their limitations
- analyse evidence
- interpret evidence
- investigate phenomena
- evaluate processes, claims and conclusions
- communicate understandings, findings, arguments and conclusions.

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• Multicellular organisms	Maintaining the internal environment <ul style="list-style-type: none">• Homeostasis• Infectious diseases	Biodiversity and the interconnectedness of life <ul style="list-style-type: none">• Describing biodiversity• Ecosystem dynamics	Heredity and continuity of life <ul style="list-style-type: none">• DNA, genes and the continuity of life• 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): • 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			

Chemistry

General senior subject

General

Chemistry is the study of materials and their properties and structure.

Students study atomic theory, chemical bonding, and the structure and properties of elements and compounds. They explore intermolecular forces, gases, aqueous solutions, acidity and rates of reaction. They study equilibrium processes and redox reactions. They explore organic chemistry, synthesis and design to examine the characteristic chemical properties and chemical reactions displayed by different classes of organic compounds.

Students develop their appreciation of chemistry and its usefulness; understanding of chemical theories, models and chemical systems; expertise in conducting scientific investigations. They critically evaluate and debate scientific arguments and claims in order to solve problems and generate informed, responsible and ethical conclusions, and communicate chemical understanding and findings through the use of appropriate representations, language and nomenclature.

Students learn and apply aspects of the knowledge and skills of the discipline (thinking, experimentation, problem-solving and research skills), understand how it works and how it may impact society.

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 and explain scientific concepts, theories, models and systems and their limitations
- apply understanding of scientific concepts, theories, models and systems within their limitations
- analyse evidence
- interpret evidence
- investigate phenomena
- evaluate processes, claims and conclusions
- communicate understandings, findings, arguments and conclusions.

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			

Physics**

General senior subject

General

Physics provides opportunities for students to engage with classical and modern understandings of the universe.

Students learn about the fundamental concepts of thermodynamics, electricity and nuclear processes; and about the concepts and theories that predict and describe the linear motion of objects. Further, they explore how scientists explain some phenomena using an understanding of waves. They engage with the concept of gravitational and electromagnetic fields, and the relevant forces associated with them. They study modern physics theories and models that, despite being counterintuitive, are fundamental to our understanding of many common observable phenomena.

Students develop appreciation of the contribution physics makes to society: understanding that diverse natural phenomena may be explained, analysed and predicted using concepts, models and theories that provide a reliable basis for action; and that matter and energy interact in physical systems across a range of scales. They understand how models and theories are refined, and new ones developed in physics; investigate phenomena and solve problems; collect and analyse data; and interpret evidence. Students use accurate and precise measurement, valid and reliable evidence, and scepticism and intellectual rigour to evaluate claims; and communicate physics understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

Students learn and apply aspects of the knowledge and skills of the discipline (thinking, experimentation, problem-solving and research skills), understand how it works and how it may impact society.

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 and explain scientific concepts, theories, models and systems and their limitations
- apply understanding of scientific concepts, theories, models and systems within their limitations
- analyse evidence
- interpret evidence
- investigate phenomena
- evaluate processes, claims and conclusions
- communicate understandings, findings, arguments and conclusions.

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): • 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			



Psychology*

General senior subject

General

Psychology provides opportunities for students to engage with concepts that explain behaviours and underlying cognitions.

Students examine individual development in the form of the role of the brain, cognitive development, human consciousness and sleep. They investigate the concept of intelligence; the process of diagnosis and how to classify psychological disorder and determine an effective treatment; and the contribution of emotion and motivation on individual behaviour. They examine individual thinking and how it is determined by the brain, including perception, memory, and learning. They consider the influence of others by examining theories of social psychology, interpersonal processes, attitudes and cross-cultural psychology.

Students learn and apply aspects of the knowledge and skill of the discipline (thinking, experimentation, problem-solving and research skills), understand how it works and how it may impact society.

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 and explain scientific concepts, theories, models and systems and their limitations
- apply understanding of scientific concepts, theories, models and systems within their limitations
- analyse evidence
- interpret evidence
- investigate phenomena
- evaluate processes, claims and conclusions
- communicates understandings, findings, arguments and conclusions.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Individual development <ul style="list-style-type: none"> • Psychological science A • The role of the brain • Cognitive development • Human consciousness and sleep 	Individual behaviour <ul style="list-style-type: none"> • Psychological science B • Intelligence • Diagnosis • Psychological disorders and treatments • Emotion and motivation 	Individual thinking <ul style="list-style-type: none"> • Localisation of function in the brain • Visual 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): • 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			

Aquatic Practices

Applied senior subject

Applied

Aquatic Practices provides opportunities for students to explore, experience and learn practical skills and knowledge valued in aquatic workplaces and other settings.

Students gain insight into the management of aquatic regions and their ecological and environmental systems, helping them to position themselves within a long and sustainable tradition of custodianship.

Students have opportunities to learn in, through and about aquatic workplaces, events and other related activities. Additional learning links to an understanding of the employment, study and recreational opportunities associated with communities who visit, live or work on and around our waterways.

Pathways

A course of study in Aquatic Practices can establish a basis for further education and employment in the fields of recreation, tourism, fishing and aquaculture. The subject also provides a basis for participating in and contributing to community associations, events and activities, such as yacht and sailing club races and competitions and boating shows.

Structure

The Aquatic Practices course is designed around:

- the four areas of study with the core topics for 'Safety and management practices' embedded in each of the four areas of study

schools determine whether to include elective topics in a course of study.

-

Objectives

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

- describe concepts and ideas in aquatic contexts
- explain concepts and ideas in aquatic contexts
- demonstrate skills in aquatic contexts
- analyse information, situations and relationships in aquatic contexts
- apply knowledge, understanding and skills in aquatic contexts
- use language conventions and features appropriate to aquatic contexts to communicate ideas and information, according to purpose
- generate plans and procedures for activities in aquatic contexts
- evaluate the safety and effectiveness of activities in aquatic contexts
- make recommendations for activities in aquatic contexts.

Areas of study	Core topics	Elective topics
Environmental	<ul style="list-style-type: none"> Environmental conditions Ecosystems Conservation and sustainability 	<ul style="list-style-type: none"> Citizen science
Recreational	<ul style="list-style-type: none"> Entering the aquatic environment 	<ul style="list-style-type: none"> Aquatic activities

Areas of study	Core topics	Elective topics
Commercial	<ul style="list-style-type: none"> • Employment 	<ul style="list-style-type: none"> • Aquaculture, aquaponics and aquariums • Boat building and marine engineering
Cultural	<ul style="list-style-type: none"> • Cultural understandings 	<ul style="list-style-type: none"> • Historical understandings
Safety and management practices	<ul style="list-style-type: none"> • Legislation, rules and regulations for aquatic environments • Equipment maintenance and operations • First aid and safety • Management practices 	—

Assessment

For Aquatic Practices, assessment from Units 3 and 4 is used to determine the student's exit result, and consists of four instruments, including no more than two assessment instruments from any one technique.

Project	Investigation	Extended response	Examination	Performance
A response to a single task, situation and/or scenario.	A response that includes locating and using information beyond students' own knowledge and the data they have been given.	A technique that assesses the interpretation, analysis/examination and/or evaluation of ideas and information in provided stimulus materials.	A response that answers a number of provided questions, scenarios and/or problems.	A technique that assesses physical demonstrations as outcomes of applying a range of cognitive, technical and physical skills.
At least two different components from the following: <ul style="list-style-type: none"> • written: 500–900 words • spoken: 2½–3½ minutes • multimodal: 3–6 minutes • performance: continuous class time • product: continuous class time. 	Presented in one of the following modes: <ul style="list-style-type: none"> • written: 600–1000 words • spoken: 3–4 minutes • multimodal: 4–7 minutes. 	Presented in one of the following modes: <ul style="list-style-type: none"> • written: 600–1000 words • spoken: 3–4 minutes • multimodal: 4–7 minutes. 	<ul style="list-style-type: none"> • 60–90 minutes • 50–250 words per item 	<ul style="list-style-type: none"> • performance: continuous class time to develop and practice the performance.

Japanese**

General senior subject

General

Japanese provides students with the opportunity to reflect on their understanding of the Japanese language and the communities that use it, while also assisting in the effective negotiation of experiences and meaning across cultures and languages. Students participate in a range of interactions in which they exchange meaning, develop intercultural understanding and become active participants in understanding and constructing written, spoken and visual texts.

Students communicate with people from Japanese-speaking communities to understand the purpose and nature of language and to gain understanding of linguistic structures. They acquire language in social and cultural settings and communicate across a range of contexts for a variety of purposes.

Students experience and evaluate a range of different text types; reorganise their thinking to accommodate other linguistic and intercultural knowledge and textual conventions; and create texts for a range of contexts, purposes and audiences.

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, tourism, economics, journalism, 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, values and attitudes
- analyse and evaluate information and ideas to draw conclusions and justify opinions, ideas and perspectives
- apply knowledge of Japanese language elements, structures and textual conventions to convey meaning appropriate to context, purpose, audience and cultural conventions
- structure, sequence and synthesise information to justify opinions, ideas and perspectives
- use strategies to maintain communication and exchange meaning in 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 and friends • Lifestyle and leisure • Education 	私達のまわり Exploring our world <ul style="list-style-type: none"> • Travel • Technology and media • The contribution of Japanese culture to the world 	私達の社会 Our society <ul style="list-style-type: none"> • Roles and relationships • Socialising and connecting with my peers • Groups in society 	私の将来 My future <ul style="list-style-type: none"> • Finishing secondary school, plans and reflections • Responsibilities and moving on

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 — short response	15%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• Extended response	30%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none">• Examination — combination response	30%	Summative external assessment (EA): <ul style="list-style-type: none">• Examination — combination response	25%

Drama*

General senior subject

General

Drama fosters creative and expressive communication. It interrogates the human experience by investigating, communicating and embodying stories, experiences, emotions and ideas that reflect the human experience. It engages students in imaginative meaning-making processes and involves them using a range of artistic skills as they make and respond to dramatic works.

Students experience, reflect on, understand, communicate, collaborate and appreciate different perspectives of themselves, others and the world in which they live. They 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. They study a range of forms, styles and their conventions in a variety of inherited traditions, current practice and emerging trends, including those from different cultures and contexts.

Students learn how to engage with dramatic works as both artists and audience through the use of critical literacies. The study of drama develops students' knowledge, skills and understanding in the making of and responding to dramatic works to help them realise their creative and expressive potential as individuals. Students learn to pose and solve problems, and work independently and collaboratively.

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 and cultural institutions, including arts administration and management, communication, education, public relations, research and science and technology.

Objectives

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

- demonstrate an understanding of dramatic languages
- apply literacy skills
- apply and structure dramatic languages
- analyse how dramatic languages are used to create dramatic action and meaning
- interpret purpose, context and text to communicate dramatic meaning
- manipulate dramatic languages to create dramatic action and meaning
- evaluate and justify the use of dramatic languages to communicate dramatic meaning
- synthesise and argue a position about dramatic action and meaning.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Share How does drama promote shared understandings of the human experience? <ul style="list-style-type: none">• cultural inheritances of storytelling	Reflect How is drama shaped to reflect lived experience? <ul style="list-style-type: none">• Realism, including Magical Realism, Australian Gothic	Challenge How can we use drama to challenge our understanding of humanity? <ul style="list-style-type: none">• Theatre of Social Comment, including Theatre of the	Transform How can you transform dramatic practice? <ul style="list-style-type: none">• Contemporary performance

<ul style="list-style-type: none"> • oral history and emerging practices • a range of linear and non-linear forms 	<ul style="list-style-type: none"> • associated conventions of styles and texts 	<p>Absurd and Epic Theatre</p> <ul style="list-style-type: none"> • associated conventions of styles and texts 	<ul style="list-style-type: none"> • associated conventions of styles and texts • inherited texts as stimulus
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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): • Project — practice-led project	35%
Summative internal assessment 2 (IA2): • Project — dramatic concept	20%		
Summative external assessment (EA): 25% • Examination — extended response			

Film, Television & New Media*

General senior subject

General

Film, Television & New Media fosters creative and expressive communication. It explores the five key concepts of technologies, representations, audiences, institutions and languages.

Students learn about film, television and new media as our primary sources of information and entertainment. They understand that film, television and new media are important channels for educational and cultural exchange, and are fundamental to our self-expression and representation as individuals and as communities.

Students creatively apply film, television and new media key concepts to individually and collaboratively make moving-image media products, and investigate and respond to moving-image media content and production contexts. Students develop a respect for diverse perspectives and a critical awareness of the expressive, functional and creative potential of moving-image media in a diverse range of global contexts. They develop knowledge and skills in creative thinking, communication, collaboration, planning, critical analysis, and digital and ethical citizenship.

Pathways

A course of study in Film, Television & New Media can establish a basis for further education and employment in the fields of

information technologies, creative industries, cultural institutions, and diverse fields that use skills inherent in the subject, including advertising, arts administration and management, communication, design, education, film and television, and public relations.

Objectives

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

- explain the features of moving-image media content and practices
- symbolise conceptual ideas and stories
- construct proposals and construct moving-image media products
- apply literacy skills
- analyse moving-image products and contexts of production and use
- structure visual, audio and text elements to make moving-image media products
- experiment with ideas for moving-image media products
- appraise film, television and new media products, practices and viewpoints
- synthesise visual, audio and text elements to solve conceptual and creative problems.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
<p>Foundation</p> <ul style="list-style-type: none"> • Concept: technologies <p>How are tools and associated processes used to create meaning?</p> <ul style="list-style-type: none"> • Concept: institutions 	<p>Story forms</p> <ul style="list-style-type: none"> • Concept: representations <p>How do representations function in story forms?</p> <ul style="list-style-type: none"> • Concept: audiences <p>How does the relationship between story forms and</p>	<p>Participation</p> <ul style="list-style-type: none"> • Concept: technologies <p>How do technologies enable or constrain participation?</p> <ul style="list-style-type: none"> • Concept: audiences <p>How do different contexts and purposes</p>	<p>Identity</p> <ul style="list-style-type: none"> • Concept: technologies <p>How do media artists experiment with technological practices?</p> <ul style="list-style-type: none"> • Concept: representations

<p>How are institutional practices influenced by social, political and economic factors?</p> <ul style="list-style-type: none"> • Concept: languages <p>How do signs and symbols, codes and conventions create meaning?</p>	<p>meaning change in different contexts?</p> <ul style="list-style-type: none"> • Concept: languages <p>How are media languages used to construct stories?</p>	<p>impact the participation of individuals and cultural groups?</p> <ul style="list-style-type: none"> • Concept: institutions <p>How is participation in institutional practices influenced by social, political and economic factors?</p>	<p>How do media artists portray people, places, events, ideas and emotions?</p> <ul style="list-style-type: none"> • Concept: languages <p>How do media artists use signs, symbols, codes and conventions in experimental ways to create meaning?</p>
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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): • Case study investigation	15%	Summative internal assessment 3 (IA3): • Stylistic project	35%
Summative internal assessment 2 (IA2): • Multi-platform project	25%		
Summative external assessment (EA): 25% • Examination — extended response			

Music**

General senior subject

General

Music fosters creative and expressive communication. It allows students to develop musicianship through making (composition and performance) and responding (musicology).

Through composition, performance and musicology, students use and apply music elements and concepts. They apply their knowledge and understanding to convey meaning and/or emotion to an audience.

Students use essential literacy skills to engage in a multimodal world. They demonstrate practical music skills, and analyse and evaluate music in a variety of contexts, styles and genres.

Pathways

A course of study in Music can establish a basis for further education and employment in the fields of arts administration, communication, education, creative

industries, public relations and science and technology.

Objectives

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

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

Structure

Unit 1	Unit 2	Unit 3	Unit 4
<p>Designs Through inquiry learning, the following is explored:</p> <p>How does the treatment and combination of different music elements enable musicians to design music that communicates meaning through performance and composition?</p>	<p>Identities Through inquiry learning, the following is explored:</p> <p>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?</p>	<p>Innovations Through inquiry learning, the following is explored:</p> <p>How do musicians incorporate innovative music practices to communicate meaning when performing and composing?</p>	<p>Narratives Through inquiry learning, the following is explored:</p> <p>How do musicians manipulate music elements to communicate narrative when performing, composing and responding to music?</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): • Performance	20%	Summative internal assessment 3 (IA3): • Integrated project	35%
Summative internal assessment 2 (IA2): • Composition	20%		
Summative external assessment (EA): 25% • Examination			

Visual Art

General senior subject

General

Visual Art provides students with opportunities to 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. Students interact with artists, artworks, institutions and communities to enrich their experiences and understandings of their own and others' art practices.

Students have opportunities to construct knowledge and communicate personal interpretations by working as both artist and audience. They use their imagination and creativity to innovatively solve problems and experiment with visual language and expression.

Through an inquiry learning model, students develop critical and creative thinking skills. They create individualised responses and meaning by applying diverse materials, techniques, technologies and art processes.

In responding to artworks, students employ essential literacy skills to investigate artistic expression and critically analyse artworks in diverse contexts. They consider meaning, purposes and theoretical approaches when ascribing aesthetic value and challenging ideas.

Pathways

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; broader areas in creative industries and cultural institutions; and diverse fields that use skills inherent in the subject, including advertising, arts administration and management, communication, design, education, galleries and museums, film and television, public relations, and 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 art practices, traditions, cultures and theories
- justify viewpoints
- experiment in response to stimulus
- create meaning through the knowledge and understanding of materials, techniques, technologies and art processes
- realise responses to communicate meaning.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Art as lens Through inquiry learning, the following are explored:	Art as code Through inquiry learning, the following are explored:	Art as knowledge Through inquiry learning, the following are explored:	Art as alternate Through inquiry learning, the following are explored:



<ul style="list-style-type: none"> • Concept: lenses to explore the material world • Contexts: personal and contemporary • Focus: People, place, objects • Media: 2D, 3D, and time-based 	<ul style="list-style-type: none"> • Concept: art as a coded visual language • Contexts: formal and cultural • Focus: Codes, symbols, signs and art conventions • Media: 2D, 3D, and time-based 	<ul style="list-style-type: none"> • Concept: constructing knowledge as artist and audience • Contexts: contemporary, personal, cultural and/or formal • Focus: student-directed • Media: student-directed 	<ul style="list-style-type: none"> • Concept: evolving alternate representations and meaning • Contexts: contemporary and personal, cultural and/or formal • Focus: continued exploration of Unit 3 student-directed focus • Media: student-directed
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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	15%	Summative internal assessment 3 (IA3): • Project — inquiry phase 3	35%
Summative internal assessment 2 (IA2): • Project — inquiry phase 2	25%		
Summative external assessment (EA): 25%			
• Examination			

Version history

Version	Date of change	Update
4	July 2022	Content change, formatting and addition of subjects
3	July 2021	Formatting, logo, content change and addition.
2	July 2020	Formatting and content change and addition.
1	August 2018	Finalised subjects.