

Malanda State High School

Senior Subject Guide

Year 11 2025



Purpose: “Within a supportive learning environment, to ensure all our students develop the literacy and numeracy skills in junior secondary that will enable them to successfully meet our Service Commitment within the senior secondary years”.

Contents

| | |
|---|-----------|
| Introduction | 2 |
| Senior Education Profile | 3 |
| Senior Statement | 3 |
| Queensland Certificate of Education (QCE) | 3 |
| Queensland Certificate of Individual Achievement (QCIA) | 3 |
| Senior Subjects | 4 |
| Underpinning Factors | 5 |
| Vocational Education and Training (VET) | 5 |
| QCE eligibility | 6 |
| Australian Tertiary Admission Rank (ATAR) eligibility | 6 |
| Applied and Applied (Essential) Syllabuses | 7 |
| Course Structure | 7 |
| General Syllabuses | 9 |
| Course Overview | 9 |
| Assessment | 9 |
| QCAA Senior Syllabuses | 14 |
| English | 15 |
| Health & Physical Education | 20 |
| Humanities | 25 |
| Mathematics | 32 |
| Sciences | 41 |
| Technologies | 51 |
| The Arts | 61 |
| Vet Courses and Other Information | 65 |
| Vet Course and Providers | 65 |
| Six Subject Senior Policy | 68 |
| QCE Credit & Duplication of Learning | 74 |
| Distance Education and TAFE Pathways | 76 |

Introduction

The purpose of this guide is to support schools through the provision of a resource that guides students and parents/carers in Years 11 and 12 subject selection. It includes a comprehensive list of all Queensland Curriculum and Assessment Authority (QCAA) subjects that form the basis of a school's curriculum offerings.

Schools design curriculum programs that provide a variety of opportunities for students while catering to individual schools' contexts, resources, students' pathways and community expectations.

The information contained in this booklet is a summary of the approved General, Applied, Senior External Examinations and Short Courses syllabuses. Schools that require further detail about any subject should access the syllabuses from the QCAA portal.

Before distribution, it is recommended that schools review, delete and add to the information to personalise the subject guide for each school context.

Senior Education Profile

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

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

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

Senior Statement

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

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

Queensland Certificate of Education (QCE)

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

Queensland Certificate of Individual Achievement (QCIA)

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

Senior Subjects

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

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

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

Applied and Applied (Essential) Syllabuses

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

General Syllabuses

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

General (Senior External Examination) Syllabuses

Senior External Examinations are suited to:

- students in the final year of senior schooling (Year 12) who are unable to access particular subjects at their school
- students less than 17 years of age who are not enrolled in a Queensland secondary school, have not completed Year 12 and do not hold a Queensland Certificate of Education (QCE) or Senior Statement
- adult students at least 17 years of age who are not enrolled at a Queensland secondary school.

Short Course Syllabuses

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

Underpinning Factors

All senior syllabuses are underpinned by:

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

Applied and Applied (Essential) Syllabuses

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

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

General Syllabuses and Short Course Syllabuses

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

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

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.

QCE Eligibility

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

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

Australian Tertiary Admission Rank (ATAR) Eligibility

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

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

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

English Requirement

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

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

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

Applied and Applied (Essential) Syllabuses

Syllabuses are designed for teachers to make professional decisions to tailor curriculum and assessment design and delivery to suit their school context and the goals, aspirations and abilities of their students within the parameters of Queensland's senior phase of learning.

In this way, the syllabus is not the curriculum. The syllabus is used by teachers to develop curriculum for their school context. The term *course of study* describes the unique curriculum and assessment that students engage with in each school context. A course of study is the product of a series of decisions made by a school to select, organise and contextualise units, integrate complementary and important learning, and create assessment tasks in accordance with syllabus specifications.

It is encouraged that, where possible, a course of study is designed such that teaching, learning and assessment activities are integrated and enlivened in an authentic applied setting.

Course Structure

Applied and Applied (Essential) syllabuses are four-unit courses of study.

The syllabuses contain QCAA-developed units as options for schools to select from to develop their course of study.

Units and assessment have been written so that they may be studied at any stage in the course. All units have comparable complexity and challenge in learning and assessment. However, greater scaffolding and support may be required for units studied earlier in the course.

Each unit has been developed with a notional time of 55 hours of teaching and learning, including assessment.

Curriculum

Applied syllabuses set out only what is essential while being flexible so teachers can make curriculum decisions to suit their students, school context, resources and expertise.

Schools have autonomy to decide:

- which four units they will deliver
- how and when the subject matter of the units will be delivered
- how, when and why learning experiences are developed, and the context in which the learning will occur
- how opportunities are provided in the course of study for explicit and integrated teaching and learning of complementary skills such as literacy, numeracy and 21st century skills
- how the subject-specific information found in this section of the syllabus is enlivened through the course of study.

Giving careful consideration to each of these decisions can lead teachers to develop units that are rich, engaging and relevant for their students.

Assessment

Applied syllabuses set out only what is essential while being flexible so teachers can make assessment decisions to suit their students, school context, resources and expertise.

Applied syllabuses contain assessment specifications and conditions for the two assessment instruments that must be implemented with each unit. These specifications and conditions ensure comparability, equity and validity in assessment.

Schools have autonomy to decide:

- specific assessment task details within the parameters mandated in the syllabus
- assessment contexts to suit available resources
- how the assessment task will be integrated with teaching and learning activities
- how authentic the task will be.

Teachers make A–E judgments on student responses for each assessment instrument using the relevant instrument-specific standards. In the final two units studied, the QCAA uses a student's results for these assessments to determine an exit result.

More information about assessment in Applied senior syllabuses is available in [Section 7.3.1](#) of the *QCE and QCIA policy and procedures handbook*.

Essential English and Essential Mathematics — Common Internal Assessment

For the two Applied (Essential) syllabuses, 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 of these subjects 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.

General Syllabuses

Course Overview

General syllabuses are developmental four-unit courses of study.

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

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

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

Assessment

Units 1 and 2 Assessments

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

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

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

Units 3 and 4 Assessments

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

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

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

Instrument-specific Marking Guides

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

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

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

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

External Assessment

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

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

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

General (Senior External Examination) Syllabuses

Course Overview

Senior External Examinations (SEEs) consist of individual subject examinations in a range of language and non-language subjects, conducted across Queensland in October and November each year.

The syllabuses are developmental courses of study consisting of four units. Each syllabus unit has been developed with a notional teaching, learning and assessment time of 55 hours.

A SEE syllabus sets out the aims, objectives, learning experiences and assessment requirements for each examination subject.

Students/candidates may enrol in a SEE subject:

- to gain credit towards a QCE
- to meet tertiary entrance or employment requirements
- for personal interest.

Senior External Examination subjects are for Year 12 students, candidates under 17 years who are not at school, and adults.

Students

School

These are students who are:

- in the **final year of senior secondary schooling** (Year 12)
- enrolled in a Queensland secondary school, and
- unable to study particular subjects at their school because the subjects are not taught or there is a timetable clash.

Non-school

These are candidates who:

- are **less than 17 years** of age
- are Queensland residents
- are not enrolled in a Queensland secondary school
- have not completed Year 12, and
- do not hold a Queensland Certificate of Education (QCE) or Senior Statement.

Adults

These are candidates who:

- will be **at least 17 years** by the end of the year in which they propose to take the examination
- are Queensland residents
- are not enrolled in a Queensland secondary school.

Eligibility — school students

Eligible Year 12 students can sit a maximum of *two* SEE subject examinations in their Year 12 year of schooling.

Year 12 students wishing to register for SEEs must do so through their secondary school. The school principal will determine students' eligibility based on information in the QCAA memorandum.

Tuition

School students must obtain appropriate tuition in examination subjects. They must discuss tuition arrangements with school staff at the start of the school year. Tuition may be available from their secondary school, an after-hours language school, a teaching centre or a tutor. A registering school that provides tuition to a student must monitor the student's progress. It is the school's responsibility to register their students for SEE examinations. **Applications from language schools or tutors will not be accepted.**

Eligibility — Candidates less than 17 years

Candidates less than 17 years of age wishing to register for SEEs:

- must reside in Queensland
- must be less than 17 years by the end of the year in which they propose to take the examination
- must not be enrolled currently in a Queensland secondary school
- must apply to establish their eligibility.

If eligible, candidates may register for a maximum of *three* SEE subjects in one calendar year.

Tuition

Although these candidates may sit examinations without tuition, QCAA recommends that they obtain tuition to maximise their chances of success.

Non-school candidates can study at an examination teaching centre, with a private tutor or independently.

Eligibility — Adult Candidates 17 years and older

Adult candidates wishing to register for SEEs:

- must reside in Queensland
- must be 17 years or older by the end of the year in which they propose to take the examination
- must not be enrolled currently in a Queensland secondary school
- do not have to satisfy any other eligibility requirements.

Adult candidates may register for as many SEE subjects as they wish.

Tuition

Although adult candidates may sit examinations without tuition, QCAA recommends that they obtain tuition to maximise their chances of success.

Adult candidates can study at an examination teaching centre, with a private tutor or independently.

Assessment

Assessment for these subjects is at the end of the course and is an external examination.

These examinations are conducted across Queensland in October and November of each year. Important dates and the examination timetable are published in the Senior Education Profile (SEP) calendar, available at www.qcaa.qld.edu.au/senior/certificates-and-qualifications/sep/sep-calendar/sep-calendar-search.

SEE results are based solely on students'/candidates' demonstrated achievement in the end-of-year examinations. Work undertaken during the year (such as class tests or assignments) is not assessed.

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

Note: Senior External Examinations (SEEs) are different from the external assessment component in General subjects in the new QCE system.

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

QCAA Senior Syllabuses

English

Applied

- Essential English

General

- English

Health and Physical Education

Applied

- Sport & Recreation

General

- Physical Education

Humanities and Social Sciences

Applied

- Business Studies

General

- Geography
- Modern History

Mathematics

Applied

- Essential Mathematics

General

- General Mathematics
- Mathematical Methods
- Specialist Mathematics

Sciences

Applied

- Science in Practice

General

- Agricultural Science
- Biology
- Chemistry
- Physics

Technologies

Applied

- Furnishing Skills
- Hospitality Practices
- Industrial Technology Skills
- Information & Communication Technology

General

- Design

The Arts

Applied

- Media Arts in Practice
- Visual Arts in Practice

The subject 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. The subject encourages students to recognise language and texts as relevant in their lives now and in the future and enables them to understand, accept or challenge the values and attitudes in these texts.

Students have opportunities to engage with language and texts through a range of teaching and learning experiences 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
- skills to choose generic structures, language, language features and technologies to best convey meaning
- skills to read for meaning and purpose, and to use, critique and appreciate a range of contemporary literary and non-literary texts
- effective use of language to produce texts for a variety of purposes and audiences
- creative and imaginative thinking to explore their own world and the worlds of others
- active and critical interaction with a range of texts, and an awareness of how language positions both them and others
- empathy for others and appreciation of different perspectives through a study of a range of texts from diverse cultures, including Australian texts by Aboriginal writers and/or Torres Strait Islander writers
- enjoyment of contemporary literary and non-literary texts, including digital texts.

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 suit particular purposes and audiences
- use appropriate roles and relationships with audiences
- construct and explain representations of identities, places, events and/or concepts
- make use of and explain opinions and/or ideas in texts, according to purpose
- 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 language choices according to register informed by purpose, audience and context
- use mode-appropriate 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 texts• Creating texts | Texts and human experiences <ul style="list-style-type: none">• Responding to texts• Creating 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">• Spoken response | Summative internal assessment 3 (IA3): <ul style="list-style-type: none">• 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">• Written response |

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

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

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

Pathways

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

Objectives

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

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

Structure

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

Assessment

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

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

Summative assessments

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

Senior External Examination — English

SEE

The following English subject is offered through the Senior External Examination (SEE) syllabus:

- English.

This syllabus is currently being revised. The *Senior subject guide* will be updated after the syllabus is released in Semester 2 2024. Please monitor QCAA memos to be notified when the syllabus is released.

Assessment

All assessment in this syllabus will be based on the learning across both Units 3 and 4 and will be conducted through external examination. Examinations require assumed knowledge from Units 1 and 2.

The external examination for the General Senior External Examination subject in English is developed and marked by assessors appointed by the QCAA.

Sport and recreation activities are a part of the fabric of Australian life and are an intrinsic part of Australian culture. These activities can encompass social and competitive sport, aquatic and community recreation, fitness and outdoor recreation. For many people, sport and recreation activities form a substantial component of their leisure time. Participation in sport and recreation can make positive contributions to a person's wellbeing.

Sport and recreation activities also represent growth industries in Australia, providing many employment opportunities, many of which will be directly or indirectly associated with hosting Commonwealth, Olympic and Paralympic Games. The skills developed in Sport & Recreation may be oriented toward work, personal fitness or general health and wellbeing. Students will be involved in learning experiences that allow them to develop their interpersonal abilities and encourage them to appreciate and value active involvement in sport and recreational activities, contributing to ongoing personal and community development throughout their lives.

Sport is defined as activities requiring physical exertion, personal challenge and skills as the primary focus, along with elements of competition. Within these activities, rules and patterns of behaviour governing the activity exist formally through organisations. Recreation activities are defined as active pastimes engaged in for the purpose of relaxation, health and wellbeing and/or enjoyment and are recognised as having socially worthwhile qualities. Active recreation requires physical exertion and human activity. Physical activities that meet these classifications can include active play and minor games, challenge and adventure activities, games and sports, lifelong physical activities, and

rhythmic and expressive movement activities.

Active participation in sport and recreation activities is central to the learning in Sport & Recreation. Sport & Recreation enables students to engage in sport and recreation activities to experience and learn about the role of sport and recreation in their lives, the lives of others and the community.

Engagement in these activities provides a unique and powerful opportunity for students to experience the challenge and fun of physical activity while developing vocational, life and physical skills.

Each unit requires that students engage in sport and/or recreation activities. They investigate, plan, perform and evaluate procedures and strategies and communicate appropriately to particular audiences for particular purposes.

Pathways

A course of study in Sport & Recreation can establish a basis for further education and employment in the fields of fitness, outdoor recreation and education, sports administration, community health and recreation and sport performance.

Objectives

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

- Investigate activities and strategies to enhance outcomes
- plan activities and strategies to enhance outcomes
- perform activities and strategies to enhance outcomes
- evaluate activities and strategies to enhance outcomes.

Structure

Sport & Recreation is a four-unit course of study. This syllabus contains 12 QCAA-developed units as options for schools to select from to develop their course of study.

| Unit option | Unit title |
|---------------|---|
| Unit option A | Aquatic recreation |
| Unit option B | Athlete development and wellbeing |
| Unit option C | Challenge in the outdoors |
| Unit option D | Coaching and officiating |
| Unit option E | Community recreation |
| Unit option F | Emerging trends in sport, fitness and recreation |
| Unit option G | Event management |
| Unit option H | Fitness for sport and recreation |
| Unit option I | Marketing and communication in sport and recreation |
| Unit option J | Optimising performance |
| Unit option K | Outdoor leadership |
| Unit option L | Sustainable outdoor recreation |

Assessment

Students complete two assessment tasks for each unit. The assessment techniques used in Sport & Recreation are:

| Technique | Description | Response requirements |
|-------------|---|---|
| Performance | Students investigate, plan, perform and evaluate activities and strategies to enhance outcomes in the unit context. | Performance Performance: up to 4 minutes Planning and evaluation One of the following: <ul style="list-style-type: none"> • Multimodal (at least two modes delivered at the same time): up to 3 minutes, 6 A4 pages, or equivalent digital media • Spoken: up to 3 minutes, or signed equivalent • Written: up to 500 words |
| Project | Students investigate, plan, perform and evaluate activities and strategies to enhance outcomes in the unit context. | Investigation and session plan One of the following: <ul style="list-style-type: none"> • Multimodal (at least two modes delivered at the same time): up to 3 minutes, 6 A4 pages, or equivalent digital media • Spoken: up to 3 minutes, or signed equivalent • Written: up to 500 words Performance Performance: up to 4 minutes |

| | | |
|--|--|---|
| | | <p>Evaluation</p> <p>One of the following:</p> <ul style="list-style-type: none"> • Multimodal (at least two modes delivered at the same time): up to 3 minutes, 6 A4 pages, or equivalent digital media • Spoken: up to 3 minutes, or signed equivalent • Written: up to 500 words |
|--|--|---|

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

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

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

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

Pathways

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

Objectives

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

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

Structure

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

Assessment

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

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

Summative assessments

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

Business Studies provides opportunities for students to develop practical business knowledge and skills for use, participation and work in a range of business contexts. Exciting and challenging career opportunities exist in a range of business contexts.

A course of study in Business Studies focuses on business essentials and communication skills delivered through business contexts. Students explore business concepts and develop business practices to produce solutions to business situations.

Business practices provide the foundation of an organisation to enable it to operate and connect with its customers, stakeholders and community. The business practices explored in this course of study could include working in administration, working in finance, working with customers, working in marketing, working in events, and entrepreneurship.

In a course of study, students develop their business knowledge and understanding through applying business practices in business contexts, such as retail, health services, entertainment, tourism, travel and mining. Schools may offer a range of situations and experiences to engage in authentic learning experiences through connections within the school, local community or organisations, businesses and professionals outside of the school. These situations and experiences provide students with opportunities to develop skills important

in the workplace to successfully participate in future employment.

Students develop effective decision-making skills and learn how to plan, implement and evaluate business practices, solutions and outcomes, resulting in improved literacy, numeracy and 21st century skills. They examine business information and apply their knowledge and skills related to business situations. The knowledge and skills developed in Business Studies enables students to participate effectively in the business world and as citizens dealing with issues emanating from business activities.

Pathways

A course of study in Business Studies can establish a basis for further education and employment in office administration, data entry, retail, sales, reception, small business, finance administration, public relations, property management, events administration and marketing.

Objectives

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

- explain business concepts, processes and practices
- examine business information
- apply business knowledge
- communicate responses
- evaluate projects.

Structure

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

| Unit option | Unit title |
|---------------|---------------------------|
| Unit option A | Working in administration |
| Unit option B | Working in finance |
| Unit option C | Working with customers |
| Unit option D | Working in marketing |
| Unit option E | Working in events |
| Unit option F | Entrepreneurship |

Assessment

Students complete two assessment tasks for each unit. The assessment techniques used in Business Studies are:

| Technique | Description | Response requirements |
|-------------------|---|--|
| Extended response | Students respond to stimulus related to a business scenario about the unit context. | One of the following: <ul style="list-style-type: none">• Multimodal (at least two modes delivered at the same time): up to 7 minutes, 10 A4 pages, or equivalent digital media• Spoken: up to 7 minutes, or signed equivalent• Written: up to 1000 words |
| Project | Students develop a business solution for a scenario about the unit context. | Action plan One of the following: <ul style="list-style-type: none">• Multimodal (at least two modes delivered at the same time): up to 5 minutes, 6 A4 pages, or equivalent digital media• Spoken: up to 4 minutes, or signed equivalent• Written: up to 600 words Evaluation One of the following: <ul style="list-style-type: none">• Multimodal (at least two modes delivered at the same time): up to 4 minutes, 4 A4 pages, or equivalent digital media• Spoken: up to 3 minutes, or signed equivalent• Written: up to 400 words |

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

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

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

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

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

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

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

Pathways

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

Objectives

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

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

Structure

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

Assessment

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

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

Summative assessments

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

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

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

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

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

Pathways

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

Objectives

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

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

Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|---|---|--|--|
| Ideas in the Modern World <ul style="list-style-type: none"> • Australian Frontier Wars, 1788–1930s (First Fleet arrives in Australia – Caledon Bay Crisis ends) • Age of Imperialism, 1848–1914 (Second Anglo-Sikh War begins – World War I begins) | Movements in the Modern World <ul style="list-style-type: none"> • May Fourth Movement in China and its aftermath, 1919–1930s (Student protests at Beijing University begin – the New Life Movement begins) • Anti-apartheid movement in South Africa, 1948–1991 (apartheid laws start – apartheid laws end) | National experiences in the Modern World <ul style="list-style-type: none"> • Germany since 1914 (World War I begins) • Soviet Union, 1920s–1945 (Russian Civil War ends – World War II ends) | International experiences in the Modern World <ul style="list-style-type: none"> • Australian engagement with Asia since 1945 (World War II in the Pacific ends) • Cold War and its aftermath, 1945–2014 (Yalta Conference begins – Russo-Ukrainian War begins) |

Assessment

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

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

Summative assessments

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

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

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

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

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

The major domains of mathematics in Essential Mathematics are Number, Data, Location and time, Measurement and Finance. Teaching and learning builds on the proficiency strands of the P–10 Australian Curriculum. Students develop their conceptual understanding when they undertake tasks that require them to connect mathematical concepts, operations and relations. They will learn to recognise definitions, rules and facts from everyday mathematics and data, and to calculate using appropriate mathematical processes.

Students will benefit from studies in Essential Mathematics because they will develop skills that go beyond the traditional ideas of numeracy. This is achieved through a greater emphasis on estimation, problem-solving and reasoning, which develops students into thinking citizens who interpret and use mathematics to make informed predictions and decisions about personal and financial priorities. Students will see mathematics as applicable to their employability and lifestyles and develop leadership skills through self-direction and productive engagement in their learning. They will show curiosity and imagination and appreciate the benefits of technology. Students will gain an appreciation that there is rarely one way of doing things and that real-world mathematics requires adaptability and flexibility.

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:

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

Structure

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

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

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

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

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

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

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

Pathways

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

Objectives

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

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

Structure

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

Assessment

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

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

Summative assessments

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

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

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

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

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

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

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

Pathways

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

Objectives

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

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

Structure

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

Assessment

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

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

Summative assessments

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

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

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

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

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

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

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

Pathways

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

Objectives

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

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

Structure

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

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

Assessment

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

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

Summative assessments

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

Senior External Examination — Mathematics

SEE

The following Mathematics subject is offered through Senior External Examination (SEE) syllabuses:

- General Mathematics.

This syllabus is currently being revised. The *Senior subject guide* will be updated after the syllabus is released in Semester 2 2024. Please monitor QCAA memos to be notified when the syllabus is released.

Assessment

All assessment in this syllabus will be based on the learning across both Units 3 and 4 and will be conducted through external examination. Examinations require assumed knowledge from Units 1 and 2.

External examinations for General Senior External Examination subjects in Mathematics are developed and marked by assessors appointed by the QCAA.

Science in Practice provides opportunities for students to explore, experience and learn concepts and practical skills valued in multidisciplinary science, workplaces and other settings. Learning in Science in Practice involves creative and critical thinking; systematically accessing, capturing and analysing information, including primary and secondary data; and using digital technologies to undertake research, evaluate information and present data.

Science in Practice students apply scientific knowledge and skills in situations to produce practical outcomes. Students build their understanding of expectations for work in scientific settings and develop an understanding of career pathways, jobs and other opportunities available for participating in and contributing to scientific activities.

Projects and investigations are key features of Science in Practice. Projects require the application of a range of cognitive, technical and reasoning skills and practical-based theory to produce real-world outcomes. Investigations follow scientific inquiry methods to develop a deeper understanding of a particular topic or context and the link between theory and practice in real-world and/or lifelike scientific contexts.

By studying Science in Practice, students develop an awareness and understanding of life beyond school through authentic, real-world interactions to become responsible and informed citizens. They develop a strong personal, socially oriented, ethical outlook that assists with managing context, conflict and uncertainty. Students gain the ability to work effectively and respectfully with diverse teams to maximise understanding of concepts, while exercising flexibility, cultural awareness and a willingness to make necessary compromises to accomplish common goals. They learn to

communicate effectively and efficiently by manipulating appropriate language, terminology, symbols and diagrams associated with scientific communication.

The objectives of the course ensure that students apply what they understand to explain and execute procedures, plan and implement projects and investigations, analyse and interpret information, and evaluate procedures, conclusions and outcomes.

Workplace health and safety practices are embedded across all units and focus on building knowledge and skills in working safely, effectively and efficiently in practical scientific situations.

Pathways

A course of study in Science in Practice is inclusive and caters for a wide range of students with a variety of backgrounds, interests and career aspirations. It can establish a basis for further education and employment in many fields, e.g. animal welfare, food technology, forensics, health and medicine, the pharmaceutical industry, recreation and tourism, research, and the resources sector.

Objectives

By the conclusion of the course of study students should:

- describe ideas and phenomena
- execute procedures
- analyse information
- interpret information
- evaluate conclusions and outcomes
- plan investigations and projects.

Structure

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

| Unit option | Unit title |
|---------------|------------------|
| Unit option A | Consumer science |
| Unit option B | Ecology |
| Unit option C | Forensic science |
| Unit option D | Disease |
| Unit option E | Sustainability |
| Unit option F | Transport |

Assessment

Students complete two assessment tasks for each unit. The assessment techniques used in Science in Practice are:

| Technique | Description | Response requirements |
|-----------------------|--|---|
| Applied investigation | Students investigate a research question by collecting, analysing and interpreting primary or secondary information. | One of the following: <ul style="list-style-type: none">• Multimodal (at least two modes delivered at the same time): up to 7 minutes, 10 A4 pages, or equivalent digital media• Written: up to 1000 words |
| Practical project | Students use practical skills to complete a project in response to a scenario. | Completed project One of the following: <ul style="list-style-type: none">• Product: 1• Performance: up to 4 minutes Documented process Multimodal (at least two modes delivered at the same time): up to 5 minutes, 8 A4 pages, or equivalent digital media |

Agricultural Science is an interdisciplinary science subject suited to students who are interested in the application of science in a real-world context. They understand the importance of using science to predict possible effects of human and other activity, and to develop management plans or alternative technologies that minimise these effects and provide for a more sustainable future. Agricultural Science provides students with a suite of skills and understandings that are valuable to a wide range of further study pathways and careers. A study of Agricultural Science can allow students to transfer learned skills to studies of other subject disciplines in the school environment.

The primary industries sector of the Australian economy is facing many challenges, and the ability of Australia to meet these challenges depends on a well-informed community and highly skilled people working in all sectors of primary industries.

Agricultural Science provides opportunities for students to engage with agricultural production systems as they constantly adapt to meet the changing needs of society. As human activities and resource demands increase and diversify, agricultural scientists, managers and producers encounter opportunities and challenges associated with the sustainable management of resources and production of food and fibre. In Unit 1, students examine the plant and animal science required to understand agricultural systems, their interactions and their components. In Unit 2, students examine resources and their use and management in agricultural enterprises, the implications of using and consuming these resources, and associated management approaches. In Unit 3, students investigate how agricultural production systems are managed through an understanding of plant and animal physiology, and how they can be

manipulated to ensure productivity and sustainability. In Unit 4, students consider how environmental, social and financial factors can be used to evaluate production systems, and how research and innovation can be used and managed to improve food and fibre production.

Agricultural Science aims to develop students':

- interest in Agricultural Science and their appreciation of how interdisciplinary knowledge can be used to understand contemporary issues in food and fibre production
- understanding and appreciation of agriculture as a complex and innovative system, and how it relates to sustainable production decisions now and into the future
- understanding that agricultural science knowledge is used in a variety of contexts and is influenced by social, economic, cultural and ethical considerations
- ability to conduct a variety of field, research and laboratory investigations involving collection and analysis of qualitative and quantitative data, and interpretation of evidence
- ability to critically evaluate agricultural science concepts, interpretations, claims and conclusions, with reference to evidence
- ability to communicate understandings and justify findings and conclusions related to agricultural production systems, using appropriate representations, modes and genres.

Pathways

A course of study in Agricultural Science can establish a basis for further education and employment in the fields of agriculture, horticulture, agronomy, ecology, food technology, aquaculture, veterinary science, equine science, environmental science, natural resource management, wildlife, conservation and ecotourism, biotechnology, business, marketing, education and literacy, research and development.

Objectives

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

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

Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|---|--|--|--|
| Agricultural systems <ul style="list-style-type: none">• Agricultural enterprises A• Animal production A• Plant production A | Resources <ul style="list-style-type: none">• Management of renewable resources• Physical resource management• Agricultural management, research and innovation | Agricultural production <ul style="list-style-type: none">• Animal production B• Plant production B• Agricultural enterprises B | Agricultural management <ul style="list-style-type: none">• Enterprise management• Evaluation of an agricultural enterprise's sustainability |

Assessment

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

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

Summative assessments

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

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

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

Biology aims to develop students':

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

Pathways

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

Objectives

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

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

Structure

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

Assessment

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

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

Summative assessments

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

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

Chemistry aims to develop students':

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

Pathways

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

Objectives

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

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

Structure

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

Assessment

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

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

Summative assessments

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

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

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

Physics aims to develop students':

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

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

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

Pathways

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

Objectives

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

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

Structure

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

Assessment

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

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

Summative assessments

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

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

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

Applied learning in manufacturing tasks supports students' development of transferable 21st century, literacy and numeracy skills relevant to future employment opportunities in the domestic, commercial and bespoke furnishing industries. Students learn to recognise and apply industry practices, interpret drawings and technical information and demonstrate

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

Pathways

A course of study in Furnishing Skills can establish a basis for further education and employment in the furnishing industry. With additional training and experience, potential employment opportunities may be found in furnishing trades as, for example, a furniture-maker, wood machinist, cabinet-maker, polisher, shopfitter, upholsterer, furniture restorer, picture framer, floor finisher or glazier.

Objectives

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

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

Structure

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

| Unit option | Unit title |
|---------------|---|
| Unit option A | Furniture-making |
| Unit option B | Cabinet-making |
| Unit option C | Interior furnishing |
| Unit option D | Production in the domestic furniture industry |
| Unit option E | Production in the commercial furniture industry |
| Unit option F | Production in the bespoke furniture industry |

Assessment

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

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

Technologies have been an integral part of society as humans seek to create solutions to improve their own and others' quality of life. Technologies affect people and societies by transforming, restoring and sustaining the world in which we live. The hospitality industry is important economically and socially in Australian society and is one of the largest employers in the country. It specialises in delivering products and services to customers and consists of different sectors, including food and beverage, accommodation, clubs and gaming. Hospitality offers a range of exciting and challenging long-term career opportunities across a range of businesses. The industry is dynamic and uses skills that are transferable across sectors and locations.

The Hospitality Practices syllabus emphasises the food and beverage sector, which includes food and beverage production and service. The subject includes the study of industry practices and production processes through real-world related application in the hospitality industry context. Production processes combine the production skills and procedures required to implement hospitality events. Students engage in applied learning to recognise, apply and demonstrate knowledge and skills in units that meet local needs, available resources and teacher expertise. Through both individual and collaborative learning experiences, students learn to perform production and service skills, and meet customer expectations of quality in event contexts.

Applied learning hospitality tasks supports student development of transferable 21st century, literacy and numeracy skills relevant to the hospitality industry and future employment opportunities. Students learn to

recognise and apply industry practices; interpret briefs and specifications; demonstrate and apply safe practical production processes; communicate using oral, written and spoken modes; develop personal attributes that contribute to employability; and organise, plan, evaluate and adapt production processes for the events they implement. The majority of learning is done through hospitality tasks that relate to 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 Hospitality Practices can establish a basis for further education and employment in the hospitality sectors of food and beverage, catering, accommodation and entertainment. Students could pursue further studies in hospitality, hotel, event and tourism or business management, which allows for specialisation.

Objectives

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

- demonstrate practices, skills and processes
- interpret briefs
- select practices, skills and procedures
- sequence processes
- evaluate skills, procedures and products
- adapt production plans, techniques and procedures.

Structure

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

| Unit option | Unit title |
|---------------|------------------------|
| Unit option A | Culinary trends |
| Unit option B | Bar and barista basics |
| Unit option C | In-house dining |
| Unit option D | Casual dining |
| Unit option E | Formal dining |
| Unit option F | Guest services |

Assessment

Students complete two assessment tasks for each unit. The assessment techniques used in Hospitality Practices are:

| Technique | Description | Response requirements |
|-------------------------|---|--|
| Practical demonstration | Students produce and present an item related to the unit context in response to a brief. | Practical demonstration Practical demonstration: menu item Planning and evaluation Multimodal (at least two modes delivered at the same time): up to 5 minutes, 8 A4 pages, or equivalent digital media |
| Project | Students plan and deliver an event incorporating the unit context in response to a brief. | Practical demonstration Practical demonstration: delivery of event Planning and evaluation Multimodal (at least two modes delivered at the same time): up to 5 minutes, 8 A4 pages, or equivalent digital media |
| Investigation | Students investigate and evaluate practices, skills and processes. | Investigation and evaluation One of the following: <ul style="list-style-type: none">• Multimodal (at least two modes delivered at the same time): up to 7 minutes, 10 A4 pages, or equivalent digital media• Written: up to 1000 words |

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

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

Applied learning supports students' development of transferable 21st century, literacy and numeracy skills relevant to a variety of industries. Students learn to

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

Pathways

A course of study in 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 aero skills, automotive, building and construction, engineering, furnishing, industrial graphics and plastics.

Objectives

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

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

Structure

Industrial Technology Skills is a four-unit course of study. This syllabus contains the four industrial sector syllabuses with QCAA-developed units as options for schools to select from to develop their course of study.

When selecting units to design a course of study in Industrial Technology Skills, the units must:

- be drawn from at least two industrial sector syllabuses and include no more than two units from each
- not be offered at the school in any other Applied industrial sector syllabus.

Assessment

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

| Technique | Description | Response requirements |
|-------------------------|---|-----------------------|
| Practical demonstration | Available in the selected industrial sector syllabus. | |
| Project | | |

Technologies are an integral part of society as humans seek to create solutions to improve their own and others' quality of life. Technologies affect people and societies by transforming, restoring and sustaining the world in which we live. In an increasingly technological and complex world, it is important to develop the knowledge, understanding and skills associated with information technology to support a growing need for digital literacy and specialist information and communication technology skills in the workforce. Across business, industry, government, education and leisure sectors, rapidly changing industry practices and processes create corresponding vocational opportunities in Australia and around the world.

Information & Communication Technology includes the study of industry practices and ICT processes through students' application in and through a variety of industry-related learning contexts. Industry practices are used by enterprises to manage ICT product development processes to ensure high-quality outcomes, with alignment to relevant local and universal standards and requirements. Students engage in applied learning to demonstrate knowledge, understanding and skills in units that meet local needs, available resources and teacher expertise. Through both individual and collaborative learning experiences, students learn to meet client expectations and product specifications.

Applied learning supports students' development of transferable 21st century, literacy and numeracy skills relevant to information and communication technology sectors and future employment opportunities. Students learn to interpret

client briefs and technical information and select and demonstrate skills using hardware and software to develop ICT products. The majority of learning is done through prototyping 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 Information & Communication Technology can establish a basis for further education and employment in many fields, especially the fields of ICT operations, help desk, sales support, digital media support, office administration, records and data management, and call centres.

Objectives

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

- demonstrate practices, skills and processes
- interpret client briefs and technical information
- select practices and processes
- sequence processes
- evaluate processes and products
- adapt processes and products.

Structure

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

| Unit option | Unit title |
|---------------|-------------------------------|
| Unit option A | Robotics |
| Unit option B | App development |
| Unit option C | Audio and video production |
| Unit option D | Layout and publishing |
| Unit option E | Digital imaging and modelling |
| Unit option F | Web development |

Assessment

Students complete two assessment tasks for each unit. The assessment techniques used in Information & Communication Technology are:

| Technique | Description | Response requirements |
|------------------|--|---|
| Product proposal | Students produce a prototype for a product proposal in response to a client brief and technical information. | Multimodal (at least two modes delivered at the same time): up to 3 minutes, 6 A4 pages, or equivalent digital media |
| Project | Students produce a product prototype in response to a client brief and technical information. | Multimodal (at least two modes delivered at the same time): up to 5 minutes, 8 A4 pages, or equivalent digital media that includes a demonstration of the product prototype |

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

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

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

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

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

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

Pathways

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

Objectives

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

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

Structure

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

Assessment

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

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

Summative assessments

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

The arts are woven into the fabric of community. They have the capacity to engage and inspire students, enriching their lives, stimulating curiosity and imagination, and encouraging them to reach their creative and expressive potential. Arts subjects provide opportunities for students to learn problem-solving processes, design and create art, and use multiple literacies to communicate intention with diverse audiences.

Media arts refers to art-making and artworks composed and transmitted through film, television, radio, print, gaming and web-based media. Students explore the role of the media in reflecting and shaping society's values, attitudes and beliefs. They learn to be ethical and responsible users and creators of digital technologies and to be aware of the social, environmental and legal impacts of their actions and practices.

When responding, students use analytical processes to identify individual, community or global problems and develop plans and designs for media artworks. They use reasoning and decision-making to justify their choices, reflecting and evaluating on the success of their own and others' art-making. When making, students demonstrate knowledge and understanding of media arts practices to communicate artistic intention. They gain an appreciation of how media artworks connect ideas and purposes with audiences. Students develop competency with and independent selection of modes, media technologies and media

techniques as they make design products and media artworks, synthesising ideas developed through the responding phase.

Pathways

Media Arts in Practice students develop the necessary knowledge, understanding and skills required for emerging careers in a dynamic and creative field that is constantly adapting to new technologies. Learning is connected to relevant arts industry practice and opportunities, promoting future employment and preparing students as agile, competent, innovative and safe arts workers, who can work collaboratively to solve problems and complete project-based work.

A course of study in Media Arts in Practice can establish a basis for further education and employment in a dynamic, creative and global media industry that is constantly adapting to new technologies, as well as more broadly in fields such as education, marketing, humanities, recreation, health and science.

Objectives

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

- use media arts practices
- plan media artworks
- communicate ideas
- evaluate media artworks.

Structure

Media Arts in Practice is a four-unit course of study. This syllabus contains four QCAA-developed units as options for schools to combine in any order to develop their course of study.

| Unit option | Unit title |
|---------------|---------------------|
| Unit option A | Personal viewpoints |
| Unit option B | Representations |
| Unit option C | Community |
| Unit option D | Persuasion |

Assessment

Students complete two assessment tasks for each unit. The assessment techniques used in Media Arts in Practice are:

| Technique | Description | Response requirements |
|---------------|--|---|
| Project | Students make and evaluate a design product and plan a media artwork that reflects a purpose and context relevant to the unit. | Design product Design product must represent: <ul style="list-style-type: none">• Variable requirements, dependent on selected pre-production format and the length or requirements of the media artwork (see response requirements for 'Media artwork' below). Planning and evaluation of design product One of the following: <ul style="list-style-type: none">• Multimodal (at least two modes delivered at the same time): up to 5 minutes, 8 A4 pages, or equivalent digital media• Written: up to 600 words• Spoken: up to 4 minutes, or signed equivalent |
| Media artwork | Students implement the design product from the project to make a media artwork relevant to the unit. | Media artwork One of the following: <ul style="list-style-type: none">• Audio: up to 3 minutes• Moving image: up to 3 minutes• Still image: up to 4 media artwork/s |

The arts are woven into the fabric of community. They have the capacity to engage and inspire students, enriching their lives, stimulating curiosity and imagination, and encouraging them to reach their creative and expressive potential. Arts subjects provide opportunities for students to learn problem-solving processes, design and create art, and use multiple literacies to communicate intention with diverse audiences.

In Visual Arts in Practice, students respond to authentic, real-world stimulus (e.g. problems, events, stories, places, objects, the work of artists or artisans), seeing or making new links between art-making purposes and contexts. They explore visual language in combination with media, technologies and skills to make artworks. Throughout the course, students are exposed to two or more art-making modes, selecting from 2D, 3D, digital (static) and time-based and using these in isolation or combination, as well as innovating new ways of working.

When responding, students use analytical processes to identify problems and develop plans or designs for artworks. They use reasoning and decision-making to justify their choices, reflecting and evaluating on the success of their own and others' art-making. When making, students demonstrate knowledge and understanding of visual features to communicate artistic intention. They develop competency with and independent selection of media,

technologies and skills as they make experimental and resolved artworks, synthesising ideas developed throughout the responding phase.

Pathways

Learning in Visual Arts in Practice is connected to relevant industry practice and opportunities, promoting future employment and preparing students as agile, competent, innovative and safe workers who can work collaboratively to solve problems and complete project-based work in various contexts.

A course of study in Visual Arts in Practice can establish a basis for further education and employment in a range of fields, including creative industries, education, advertising and marketing, communications, humanities, health, recreation, science and technology.

Objectives

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

- use visual arts practices
- plan artworks
- communicate ideas
- evaluate artworks.

Structure

Visual Arts in Practice is a four-unit course of study. This syllabus contains four QCAA-developed units as options for schools to combine in any order to develop their course of study.

| Unit option | Unit title |
|---------------|---------------------------|
| Unit option A | Looking inwards (self) |
| Unit option B | Looking outwards (others) |
| Unit option C | Clients |
| Unit option D | Transform & extend |

Assessment

Students complete two assessment tasks for each unit. The assessment techniques used in Visual Arts in Practice are:

| Technique | Description | Response requirements |
|------------------|---|--|
| Project | Students make experimental or prototype artworks, or design proposals or stylistic experiments. They evaluate artworks, art style and/or practices that explore the focus of the unit. Students plan resolved artworks. | <p>Experimental folio Up to 8 experimental artworks: 2D, 3D, digital (static) and/or time-based</p> <p>OR</p> <p>Prototype artwork 2D, 3D, digital (static) and/or time-based media: up to 4 artwork/s</p> <p>OR</p> <p>Design proposal Multimodal (at least two modes delivered at the same time): up to 5 minutes, 8 A4 pages, or equivalent digital media, including up to 4 prototype artwork/s — 2D, 3D, digital (static) and/or time-based</p> <p>OR</p> <p>Folio of stylistic experiments Up to 8 experimental artworks: 2D, 3D, digital (static) and/or time-based</p> <p>AND</p> <p>Planning and evaluations One of the following:</p> <ul style="list-style-type: none"> • Multimodal (at least two modes delivered at the same time): up to 5 minutes, 8 A4 pages, or equivalent digital media • Written: up to 600 words • Spoken: up to 4 minutes, or signed equivalent |
| Resolved artwork | Students make a resolved artwork that communicates purpose and context relating to the focus of the unit. | <p>Resolved artwork</p> <ul style="list-style-type: none"> • 2D, 3D, digital (static) and/or time-based media: up to 4 artwork/s |

Code of Practice

Preamble

Malanda State High School is a Registered Training Organisation (RTO) and discharges its responsibilities for compliance with the *Australian Quality Training Framework Standards for Registered Training Organisations*. This includes a commitment to recognise training qualifications issued by other Registered Training Organisations. The school is registered to deliver a range of Vocational Education and Training programs under the direction of the Queensland Studies Authority (QSA) and Australian Skills Quality Authority (ASQA).

The mission of the school as an RTO is to deliver quality training across a range of selected industry areas in accordance with the National Training Packages and State Accredited Courses. Malanda State High School reserves the right to amend the code of practice to suit the needs of the training organisation as required. All amendments will be in accordance with legislation covering RTOs.

Legislative Requirements

Malanda State High School will meet all legislative requirements of State and Federal government. In particular, Workplace Health and Safety, Workplace Relations and Vocational Placements standards will be met at all times.

Access and Equity

All students will be recruited in an ethical and responsible manner and consistent with the requirements of the curriculum or National Training Package. Our Access and Equity Policy ensures that student selection decisions comply with equal opportunity legislation.

Appropriate, qualified staff will assess the extent to which the applicant is likely to achieve the stated competency standards and outcomes of the course, based on their qualifications and experience.

Quality Management Focus

Malanda State High School has a commitment to providing a quality service and a focus on continuous improvement. We value feedback from students, staff and employers for incorporation into future programs.

Client Service

We have sound management practices to ensure effective client service. In particular, we have client service standards to ensure timely issue of student assessment results and qualifications. These will be appropriate to the competence achieved and issued in accordance with national guidelines.

Our quality focus includes a Recognition of Prior Learning, a fair and equitable Refund Policy, a Complaint and Appeal Policy, an Access and Equity Policy and student welfare and guidance services. Where necessary, arrangements will be made for those clients requiring literacy and/or numeracy support programs. We will take every opportunity to ensure that this information is disseminated, understood and valued by personnel and clients.

Our student information will ensure that all charges are known to students before enrolment, that the course content and assessment procedures are explained and that vocational outcomes are outlined.

Internal Review

Malanda State High School has a system of internal review which occurs each year. Meetings are held annually with representatives and employers from the relevant industry areas, students and staff. Reports are tabled and feedback documented. The internal review process assists in the development of quality training and assessment.

External Review

Malanda State High School has agreed to participate in external monitoring and audit. This covers random quality audits, audit following complaint and audit for the purpose of registration.

Management and Administration

Malanda State High School has policies and management strategies, which ensure sound financial and administrative practices. Management guarantees the organisation's sound financial position. We have a Refund Policy that is fair and equitable. Student records are managed securely and confidentially and are available for student perusal on request.

VET in Schools (VETiS)

VET

Vocational education and training (VET) courses are available to students while they are still at school. This is often referred to as VETiS.

VET is learning which is directly related to work. Nationally recognised qualifications are developed by industry to give people the knowledge and skills they need to work in a particular job.

You can undertake VET at school:

- as part of your school studies - delivered and resourced by a school registered training organisation
- by enrolling in a qualification with an external registered training organisation - funded either by the Department of Employment, Small Business and Training's VET investment budget or through fee-for-service arrangements i.e. where the student or parent pays for the qualification.
- as a school-based apprentice or trainee.

For more information on VET delivered in schools, visit the [Department of Education's website](#).

For more information on VET in schools courses funded through the VET investment budget, visit the [VETiS page](#) on this website or [VETiS frequently asked questions](#).

School-based Apprenticeships and Traineeships

School-based apprenticeships and traineeships allow high school students - typically Years 11 and 12 - to work with an employer as paid employees, while studying for their senior certificate. At the same time, students undertake a training qualification with a supervising registered training organisation chosen by both the employer and the student. A school-based apprentice's or trainee's employment and/or training arrangements must impact on their school timetable for the program to be considered school based.

(Extract from: <https://desbt.qld.gov.au/training/training-careers/incentives/vetis>)

(Please see this website to access links referenced above)

Malanda SHS's Year 11 2025 External Registered Training Organisation VET Providers:

Multiple VET courses can be studied however VETiS funding can only be accessed for first course. Fees are incurred for any subsequent courses.

| Provider | Certification | Approximate Cost (Fee For Service) * |
|--------------------------|--|--|
| <i>Civil Safety QLD</i> | Certificate II Agriculture | \$4300 |
| <i>MiHaven</i> | Certificate III Hospitality (Certificate II Hospitality completed in first year) | \$750** |
| <i>Binnacle Training</i> | Certificate III Fitness (Certificate II Sport and Recreation embedded) | \$365 Cert II Entry Qualification = \$265 + Cert III Gap Fee = \$100 (+ First Aid \$55) |

* This cost is only for students who access these courses without VETiS funding.

** VETiS funding covers the cost of the Certificate II Hospitality. The Certificate III Hospitality upgrade will cost all enrolled students approximately \$750.

AHC20122 - Certificate II in Agriculture

VET

Course Overview

The Certificate II in Agriculture is designed for those starting their journey in the agricultural industry. This course provides you with the foundational knowledge and practical skills essential for working in various agricultural sectors, including livestock, crops, and farming operations. Learn about livestock handling, fencing, machinery operation, and more, with guidance from our experienced Trainer Assessors. This course is ideal for those seeking an entry-level role in agriculture or wishing to gain further skills to support their career advancement.

Duration of Course

2 Academic Years (Years 11 & 12)

Career Opportunities and Pathways

The Certificate II in Agriculture provides various career and study pathways, including:

Career Pathways in a variety of industries:

- **Farm Worker:** Work on farms assisting with livestock handling, crop management, and general farm maintenance.
- **Livestock Hand:** Specialise in handling livestock, ensuring their welfare and managing their care.
- **Crop Farm Worker:** Engage in planting, cultivating, and harvesting crops across various farming enterprises.

Study Pathways:

- **Certificate III in Agriculture:** Further develop your skills in agriculture with a higher-level qualification.
- **Diploma of Agriculture:** Advance your expertise and prepare for roles like farm management or agribusiness.
- **Further Studies within Agriculture and Related Industries:** Expand your knowledge in sustainable farming, agribusiness, and other specialised areas.

These are just a few examples, and the specific career and study opportunities and pathways will depend on your skills, interests, and experience.

Entry Requirements

There are no specific entry requirements for this course however students will require:

- A sufficient level of language, literacy and numeracy is required for students to be able to complete the required assessments

Units

In total, you need to complete 16 nationally recognised units of competency. This qualification is nationally recognised under the Australian Qualifications Framework (AQF) and upon completion you will be issued with a Statement of Attainment.

We offer a variety of different elective units for this qualification to ensure we meet your needs. Our team will work with you to find the best units tailored to your career goals.

Units of Competency:

AHCWHS202 Participate in workplace health and safety processes
AHCWRK211 Participate in environmentally sustainable work practices
AHCWRK212 Work effectively in industry
AHCWRK213 Participate in workplace communications
AHCINF206 Install, maintain and repair farm fencing
AHCLSK204 Carry out regular livestock observation
AHCLSK205 Handle livestock using basic techniques
AHCMOM201 Operate two wheel motorbikes
AHCMOM202 Operate tractors
AHCMOM203 Operate basic machinery and equipment
AHCMOM204 Undertake operational maintenance of machinery
AHCMOM216 Operate side by side utility vehicles
AHCMOM217 Operate quad bikes
AHCBEK203 Open and reassemble a beehive
AHCBEK205 Prepare and use a bee smoker
AHCBEK206 Assemble and maintain beekeeping components

SIT20322 - Certificate II in Hospitality

VET

DURATION OF COURSE

1 academic year (Year 11 or 12 students)

COURSE DETAILS

This qualification is an entry level course into the hospitality industry. This qualification provides a pathway to work in various hospitality settings, such as restaurants, hotels, motels, catering operations, clubs, pubs, cafés, and coffee shops. In year 12, students may elect to further their studies by undertaking an additional five (5) (dependent on elective choices) units of competency to upgrade to the SIT30622 Certificate III in Hospitality.

PACKAGING RULES

To achieve this qualification; SIT20322 Certificate II in Hospitality, twelve (12) units must be completed including six (6) core and six (6) elective units. (For a complete list of the core and elective units, please view our Course Flyer).

ENTRY REQUIREMENTS

There are no entry requirements.

COURSE REQUIREMENTS

It is a requirement of this qualification that you complete twelve (12) service shifts in industry, which we will assist you to organise with one of our partner organisations. Please note each service shift is required to be a minimum of two (2) hours.

DELIVERY MODE

Delivery will be face to face where a MiHaven Training Trainer and Assessor will come to the school and deliver two (2) lessons per week (dependent on enrolment numbers), an additional lesson each week will be staffed by the school where students will be supervised to complete self-directed work and practical components. Delivery modes can also be flexible and delivered within specified and agreed upon blocks of training.

ASSESSMENT

You may be assessed in a number of ways while you are studying with MiHaven Training, including observation, written assessment, questioning, third-party feedback, and through Recognition of Prior Learning (RPL). Assessment is continuous, and competency based. Assessments are predominately paper based, however electronic options are becoming available in 2025.

FEES

Payment of this course is made by accessing eligible students VETiS funding, or \$750 per student Fee-for-Service for students who are not eligible for VETiS Funding. Payment for this course is made under a Fee-for-Service arrangement with individual students. Please note: Fee for-Service prices will be reduced to \$250 per non-eligible student, if the specific program has fifteen (15) VETiS funded students enrolled and participating in the program.

SIT30622 - Certificate III in Hospitality

VET

DURATION OF COURSE

1 academic year (Year 11/12 students)

COURSE DETAILS

Fee for Service (Upgrade only) SIT30622 Certificate III in Hospitality This qualification reflects the role of individuals who have a range of well-developed hospitality service, sales or operational skills and sound knowledge of industry operations. This qualification provides a pathway to work in organisations such as restaurants, hotels, motels, clubs, pubs, cafés, and coffee shops. This qualification allows for multiskilling and for specialisation in accommodation services, food and beverage and gaming.

PACKAGING RULES

To achieve this qualification; SIT30622 Certificate III in Hospitality, fifteen (15) units must be completed including six (6) core units and nine (9) elective units. Depending on elective choices the previous year, only five (5) additional units are required to be completed for the upgrade program. (For a complete list of the core and elective units, please view our Course Flyer).

ENTRY REQUIREMENTS

The upgrade program is only applicable to student's who have completed the MiHaven Training SIT20322 Certificate II Hospitality in the previous academic year. New entrants are not permitted to enrol.

COURSE REQUIREMENTS

It is a requirement of this qualification that you complete thirty-six (36) service shifts in industry (twelve (12) shifts are credited from SIT20322 Certificate II Hospitality in the previous year), which we will assist you to organise with one of our partner organisations.

DELIVERY MODE

Delivery will be face to face where a MiHaven Training Trainer and Assessor will come to the school and deliver one (1) lesson per week (dependent on enrolment numbers), an additional two (2) lessons each week will be staffed by the school where students will be supervised to complete self-directed work and practical components. Delivery modes can also be flexible and delivered within specified and agreed upon blocks of training.

ASSESSMENT

You may be assessed in a number of ways while you are studying with MiHaven Training, including observation, written assessment, questioning, third-party feedback, and through Recognition of Prior Learning (RPL). Assessment is continuous, and competency based. Assessments are predominately paper based, however electronic options are becoming available in 2025.

FEES

\$750 Fee-for-Service for students. Payment for this course is made under a Fee-for-Service arrangement with individual students. Please note, students wanting to enrol in term 4, to capture service shifts undertaken over the holiday period will need to pay a \$50 enrolment fee up front, leaving the remaining \$700 to be paid in term 1, the next calendar year.

SIS30321 Certificate III in Fitness and SIS20122 Certificate II in Sport and Recreation

VET

DURATION OF COURSE

2 academic years (Year 11/12 students)

COURSE DETAILS

This qualification provides a pathway to work as a fitness instructor in settings such as fitness facilities, gyms and leisure and community centres. Students will facilitate programs within their school community and acquire skills including:

- Community fitness programs
- Strength and conditioning for athletes and teams
- 1-on-1 and group fitness sessions
- Exercise science and nutrition
- Anatomy and physiology

PACKAGING RULES

To achieve this qualification in Certificate III in Fitness, 15 units of competency are required. An additional 4 units are required for dual qualification.

UNITS OF COMPETENCY

HLTWHS001 Participate in workplace health and safety
SISXIND011 Maintain sport, fitness and recreation industry knowledge
BSBSUS211 Participate in sustainable work practices
BSBPEF202 Plan and apply time management
SISPAR009 Participate in conditioning for sport
SISXCCS004 Provide quality service
SISXEMR001 Respond to emergency situations
HLTAID011 Provide first aid
SISOFLD001 Assist in conducting recreation sessions
SISXFAC006 Maintain activity equipment
BSBPEF301 Organise personal work priorities
BSBOPS304 Deliver and monitor a service to customers
SISFFIT035 Plan group exercise sessions
SISFFIT036 Instruct group exercise sessions
SISFFIT032 Complete pre-exercise screening and service orientation
SISFFIT033 Complete client fitness assessments
SISFFIT052 Provide healthy eating information
SISFFIT040 Develop and instruct gym-based exercise programs for individual clients
SISFFIT047 Use anatomy and physiology knowledge to support safe and effective exercise

Entry Requirements

At enrolment, each student will be required to create (or simply supply if previously created) a Unique student Identifier (USI). A USI creates an online record of all training and qualifications attained in Australia.

COURSE REQUIREMENTS

A Language, Literacy and Numeracy (LLN) screening process is undertaken at the time of initial enrolment (or earlier) to ensure students have the capacity to effectively engage with the content and to identify support measures as required.

STUDY MODE

Combination of classroom and project-based learning, online learning (self-study) and practical work-related experience.

COST (Fee-For-Service)

\$365.00 per person (Certificate II entry qualification - \$265.00 + Certificate III Gap Fee - \$100.00)
(+ First Aid \$55.00)

Possible additional fees for excursion to other outside venues to participate in and to conduct fitness activities.

QCE OUTCOME

Maximum of 8 QCE Credit

Program Disclosure

The Program Disclosure sets out the services and training products Binnacle Training as RTO provides and those services carried out by the School as Third Party (i.e. the facilitation of training and assessment services). To access Binnacle's Program Disclosures, please visit: www.binnacletraining.com.au/rto

Six Subject Senior Policy



Students at Malanda SHS in Year 11 and 12 are required to study six subjects. There are a number of benefits to students when this occurs:

1. Helps in the calculation and determination of ATAR for relevant students;
2. Enables students to meet literacy and numeracy requirements of a QCE;
3. Enables students to attain a QCE;
4. Provides greater learning opportunities for students in a supervised environment.

At Malanda SHS, students will be individually managed to determine if a variation to the six subject senior policy will occur. A variation to this policy is likely to occur when it is determined that a student will benefit from a variable progression rate (VPR), or a student enrolls in a 2 day/3 day programme of study based around the studying of a VET course or enrolment in a school based apprenticeship or traineeship.

Any variation to the six subject senior policy will usually occur at the SET planning interview in Year 10. However, other circumstances may arise (e.g. student illness) that may change the number of subjects a student undertakes at any given time. All situations will be managed on a case by case basis for each individual student.

Related policies:

Education (General Provisions) Act (2006)

QCAA policy: Variable progression rate

MSHS policy: Variable progression rate (based on QCAA policy).

QCE Credit and Duplication of Learning

QCE Requirements for Year 12

The Queensland Certificate of Education (QCE) is Queensland's internationally recognised senior secondary schooling qualification.

To be issued a QCE, students need to accrue the set amount of learning, at the set standard, in a set pattern, while meeting literacy and numeracy requirements. These requirements are aimed at ensuring students complete their senior schooling with the knowledge and skills they need for success in life beyond school. The QCE is issued to eligible students when they meet all requirements, usually at the end of Year 12.

The QCE demonstrates to employers, tertiary institutions and the wider community that school leavers have met the set standard by completing a learning program with sufficient breadth and depth. To support this, the QCAA ensures that students accrue credit to a QCE for new learning only.

Vocational education and training (VET) provides valid and important pathway options for many students. Students may enrol in any Applied subject and/or VET qualification. Students will not accrue credit where duplication of learning is identified.

This factsheet outlines how QCE credit will accrue in:

- Applied subjects and VET Certificate II qualifications
- VET qualifications in - any training package
 - the same training package
- Diploma and Advanced Diploma qualifications.

VET and QCE Credit

The QCAA recognises completion and partial completion of courses of study and assigns QCE credit appropriate to the amount of learning students have completed. All completed qualifications and Applied subjects are recorded on the statement of results.

Applied Subjects and VET Qualifications

Applied subjects and Certificate II level VET qualifications that have similar subject matter and learning goals (as determined by the QCAA) are considered duplication of learning as outlined in the following table.



For all Queensland schools

Applied Subjects and VET Qualifications with Duplication of Learning and QCE Credit

| Learning Area | Applied Subject | VET Qualification | Max. QCE credit |
|--|--|--|-----------------|
| English | Essential English | No duplication | 4 |
| Health and Physical Education | Early Childhood Studies | No duplication | 4 |
| | Sport and Recreation | SIS20115 Certificate II in Sport & Recreation | 4 |
| | | SIS20122 Certificate II in Sport & Recreation | |
| Humanities and Social Sciences | Business Studies | BSB20120 Certificate II in Workplace Skills | 4 |
| | Religion & Ethics | No duplication | 4 |
| | Social & Community Studies | No duplication | 4 |
| | Tourism | SIT20116 Certificate II in Tourism | 4 |
| | | SIT20122 Certificate II in Tourism | |
| Mathematics | Essential Mathematics | No duplication | 4 |
| Sciences | Agricultural Practices | AHC20116 Certificate II in Agriculture | 4 |
| | | AHC21216 Certificate II in Rural Operations | |
| | | AHC20122 Certificate II in Agriculture | |
| | Aquatic Practices | No duplication | 4 |
| Technologies | Science in Practice | No duplication | 4 |
| | Building & Construction Skills | CPC20220 Certificate II in Construction Pathways | 4 |
| | Engineering Skills | MEM20422 Certificate II in Engineering Pathways | 4 |
| | Fashion | MST20722 Certificate II in Apparel, Fashion and Textiles | 4 |
| | Furnishing Skills | MSF20522 Certificate II in Furniture Making Pathways | 4 |
| | Hospitality Practices | SIT20316 Certificate II in Hospitality | 4 |
| | | SIT20322 Certificate II in Hospitality | |
| | Industrial Graphics Skills | No duplication | 4 |
| | Industrial Technology Skills | MSM20216 Certificate II in Manufacturing | 4 |
| The Arts | Information & Communication Technology | ICT20120 Certificate II in Applied Digital Technologies | 4 |
| | Arts in Practice | No duplication | 4 |
| | Dance in Practice | CUA20120 Certificate II in Dance | 4 |
| | Drama in Practice | No duplication | 4 |
| | Media Arts in Practice | No duplication | 4 |
| | Music in Practice | CUA20620 Certificate II in Music | 4 |
| | Visual Arts in Practice | CUA20720 Certificate II in Visual Arts | 4 |
| Note: If a qualification on this list is superseded, the new qualification will be considered 'duplication of learning' unless otherwise advised. | | | |

Distance Education

Malanda High School can offer students the option of Distance Education subjects through Brisbane or Cairns. This is typically on offer for students wishing to study a subject that the school does not offer (e.g. French, German).

If interested in pursuing this option, you need to ensure that you are self-motivated and able to study by yourself as well as able to ensure continual access to the internet and phone for teacher lectures. An interview with a member of the Administration will also need to occur before approval is granted to study a Distance Education Subject. Students should consider this option very carefully. There is a very high failure or non-completion rate.

- www.cairnssde.qld.edu.au
- www.brisbanesde.eq.edu.au
- <http://education.qld.gov.au/learningplace>

Successful students will have study lessons allocated to the Library where they will be able to use the Distance Education facility.

Students will be required to pay a fee to study this course.

Distance Education information available from the Head of Student Support (Senior) upon request.

TAFE Pathways



DELIVERY & LOCATION

Face-to-face, one day a week

Bowen

Burdekin

Cairns

Charters Towers – DTTC

Innisfail

Malanda

The Whitsundays

Townsville Trade Training

Centre (Bohle)

Face-to-face, block training

Mount Isa

Thursday Island

DURATION

4 terms

*FEES

There is no cost to students or the school for the first qualification. Funding for this certificate qualification is available through the Vocational Education and Training in Schools (VETIS) program, funded by the Queensland Government. Eligibility criteria applies. Refer to page 10 of this guide for more information.

QCE CREDITS

4 credits

Kick start your career in the automotive industry with this foundation course. Gain basic skills in electrical, marine and mechanical components and systems. Learn how to use appropriate tools and equipment to complete basic removal, inspection and refitting of automotive components. Use this training as a pathway to an apprenticeship.

Certificate II in Automotive Vocational Preparation

COURSE CODE: AUR20720

✓ VETIS FUNDED*

Core units

| | |
|-----------|--|
| AURAEA002 | Follow environmental and sustainability best practice in an automotive workplace |
| AURAF103 | Communicate effectively in an automotive workplace |
| AURAF104 | Resolve routine problems in an automotive workplace |
| AURASA102 | Follow safe working practices in an automotive workplace |
| AURETR103 | Identify automotive electrical systems and components |
| AURLTA101 | Identify automotive mechanical systems and components |
| AURTTK102 | Use and maintain tools and equipment in an automotive workplace |

Elective units**

| | |
|-----------|---|
| AURETK001 | Identify, select and use low voltage electrical test equipment |
| AURETR115 | Inspect, test and service batteries |
| AURTTA003 | Use and maintain basic mechanical measuring devices |
| AURTTED03 | Remove and tag engine system components |
| AURTTED07 | Dismantle and assemble single cylinder four-stroke petrol engines |

Pathway options

Certificate II in Automotive Vocational Preparation AUR20720

Apprenticeship Only

Certificate III in Automotive Electrical Technology AUR30320

Certificate III in Marine Mechanical Technology AUR30520

Certificate III in Light Vehicle Mechanical Technology AUR30620

Certificate III in Heavy Commercial Vehicle Mechanical Technology AUR31120

Certificate III in Mobile Plant Technology AUR31220

Certificate III in Automotive Sales AUR31020

Certificate III in Motorcycle Mechanical Technology AUR30820

Certificate III in Outdoor Power Equipment AUR30720

Post-trade study

Certificate IV in Automotive Mechanical Diagnosis AUR40216

Career outcomes

Trades assistant, vehicle service assistant, automotive service assistant, trainee service person, automotive trainee

Automotive electrician, automotive air-conditioning fitter, automotive electrical fitter, automotive manufacturing technician, automotive mechanic, automotive parts interpreter, diesel fitter, vehicle body builder

** Electives studied will be dependent on location. (Total of 5 electives will be delivered).