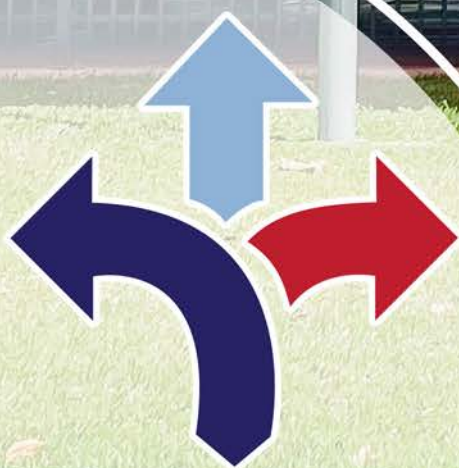




SENIOR SCHOOL
Year 10 to 12

SUBJECT CHOICES

2026



MACKAY CHRISTIAN COLLEGE

Christian Education on Purpose

KINDERGARTEN TO YEAR 12

2

0

2

6

CONTENTS

A Message from the College Principal	4
Our Mission and Vision	5
A Message from Head of Senior School	6
Senior Expectations	7
Thinking About My Options	8
 Year 10 in 2025	 9
Year 10	10
 Year 10 Core Subjects	 11
Careers Education	12
Our Values Subject: CLEAR	12
 Year 10 Elective Subjects	 16
Skills Framework	20
 Year 11 & 12 General Subjects	 22
English	23
General Mathematics	24
Mathematical Methods	25
Biology	26
Chemistry	27
Drama	28
Film, TV & New Media	29
Geography	30
Literature	31
Modern History	32
Physical Education	33
Physics	34
Specialist Mathematics	35
Study of Religion	36

Year 11 & 12 Applied Subjects	38
Essential English	39
Essential Mathematics	40
Agricultural Practices	41
Building & Construction Skills	42
Business Studies	43
Early Childhood Studies	44
Hospitality Practices	45
Industrial Graphics Skills	46
Information Communication Technology	47
Sport & Recreation	48
Visual Arts in Practice	49
 Vocational Learning Certificates	 50
• Certificate II in Health Support Services (HLT23221)	51
• Certificate III in Health Services Assistance (HLT33115)	
Trade Training Centre	52
Certificate II in Engineering Pathways (MEM20413)	53
 Planning your future	 55
Employability Skills Framework	56
 Appendix	 58
MEM20413 Competencies	59
Year 11 - HLT23215 Competencies	60
Year 12 - HLT33115 Competencies	61
 Additional Information	 63
Queensland Certificate of Education (QCE)	64
Australian Tertiary Admission Rank (ATAR)	66
Make Your Decision	69



A MESSAGE FROM THE COLLEGE PRINCIPAL

We have been placed in a created world of wonders. Learning is all about discovering and investigating this world and our place in it.

A formal education provides structured learning about different arenas of knowledge and their associated skills, and this learning continues for our whole life.

At Mackay Christian College, we encourage students to try a variety of subject areas and discern which of these areas they feel most drawn to. Usually, your favourite subjects will then lead you to train and be employed in a workplace that brings joy, satisfaction and personal success.

Engaging in the Subject Expo provides information and suggestions for choosing your subjects and developing a potential career path for your future. It is important to discover which subjects appeal to you and in which subjects you naturally do well.

Father God has a plan and purpose for each created person and subject choices can help propel you into your particular purpose. Whether predominantly academic or a trade pathway, service industry or creative arts, all students will find their place utilising their gifts and talents.

Please carefully read the information in this booklet to assist you to select your subject choices.

May your application to learning be a blessing to others.

"For we are God's masterpiece. He has created us anew in Christ Jesus, so we can do the good things he planned for us long ago." (Ephesians 2:10, NLT)

Best regards,

Dr Lesley Tunnah
College Principal

Our Motto

Thy kingdom come, 'Thy will be done', on earth as it is in heaven
(Luke 11:2)

Our Vision

Our vision is for an independent Christian school providing excellent, Christ-centred learning opportunities that encourage the fulfilment of God's purposes.

Our Mission

The College aims to provide Christ-centred education that assists in revealing God's personal plan for each student from Pre-Prep to Year 12 through equitable, excellent learning opportunities that develop resilient, confident, creative and successful lifelong learners who make a positive impact in their world.

Our Aim

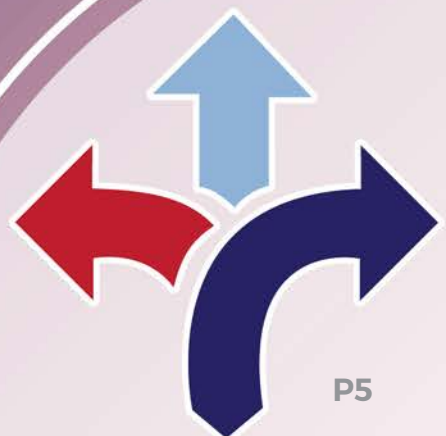
'Christian education on purpose'

2

0

2

6





A MESSAGE FROM THE HEAD OF SECONDARY SCHOOL

Senior School at Mackay Christian College is about growing students from a Christian Worldview approach to meet the challenges of the future. We remain focused on providing the best opportunities for young people to prepare for life, work and study beyond school.

We seek to bring a balance of support and challenge to equip students academically, socially and emotionally to confidently face the challenges their individual pathways will provide as they seek to fulfil God's plan for their lives.

There is a lot of talk in education about critical thinking, creative thinking, communication, collaboration and teamwork, personal and social skills, and ICT skills. At Mackay Christian College these things have for a long time been part of our Vision of a Learner. For the last 20 years we have been striving to support and encourage students to become "self-directed; strategic producers; responsive communicators; creative reflective investigators; empathetic servant leaders and resilient problem solvers."

Our goal continues to be to provide opportunity for students to build and demonstrate these skills through a variety of Senior schooling options and extra-curricular activities while maintaining a strong focus on the core skills of English and Mathematics, supported by a cross-curricular approach to mastering a range of IT platforms.

As Head of Secondary, it is exciting to work with the whole dedicated MCC team, to bring all our effort, to work with parents and families to encourage students to test and stretch themselves to 'Become all God wants them to be.'

Looking forward to working with you. Yours in Christ's service,

Ms Debbie Wright
Head of Secondary School

SENIOR EXPECTATIONS

The Senior years of school are exciting and students can expect many opportunities during these three years to further grow and develop their gifts and talents as leaders and role models in the college community.

Our staff desire to build relationships and foster this growth into young adulthood through the classroom, camping and sports programs, chapel, and extra curricular activities.

Students are taught study skills and are often given greater independence in their learning activities.

With this greater independence also comes greater responsibility, and a whole range of new expectations apply to the students.

Homework: Senior students may be expected to do up to two and a half hours of homework per night.

Independent Study: Students are encouraged to become independent learners. This is a key skill which they will need to develop both for tertiary education and to become independent workers in the workplace. This is fostered by the approach which we have adopted in the college whereby the students are encouraged to assume the responsibility for their own learning.

Skill Areas: Senior education is a place of acquisition of new skills. For instance, Modern History and Geography foster research and referencing skills whilst Biology and Mathematical Methods focus on process skills. These areas are indeed great challenges for the students.

Behaviour: A higher adult standard of behaviour and attitude is expected from Year 10s, 11s and 12s, particularly since they now become examples to members of the Middle and Junior Schools. Any students who are not regularly submitting work, not participating in class, or demonstrating a generally non-cooperative attitude may be asked to justify their continued enrolment in the college.



THINKING ABOUT MY OPTIONS

Question:

Should I stay at school or leave?

I am aiming for... (tick one or more)

- ☐ Queensland Certificate of Education (QCE)
- ☐ Australian Tertiary Admissions Rank (ATAR) and Tertiary Entrance
- ☐ TAFE Certificate
- ☐ School Based Apprenticeship or Traineeship
- ☐ Full time Apprenticeship or Traineeship
- ☐ Continue at school until I get a job

The Queensland Certificate of Education (QCE) is Queensland's senior secondary school qualification issued to eligible students when they meet all the requirements, either at the completion of Year 12 or after they have left school. To achieve a QCE, students must achieve the set amount of learning, at the set standard, in a set pattern, while meeting the literacy and numeracy requirements. Students must achieve 20 credits from contributing courses of study, including Queensland Curriculum Assessment Authority (QCAA) developed subjects, Vocational Education and Training (VET) qualifications or other recognised studies.

Refer to Appendix for more information

Australian Tertiary Admissions Rank (ATAR) and Tertiary Entrance.

The ATAR replaced the Overall Position (OP) in 2020. Eligible students are awarded an ATAR between 0.00 and 99.95 with increments of 0.05. ATARs below 30 are reported as '30.00 or less'. The ATAR is calculated by the Queensland Tertiary Admissions Centre (QTAC) based on either:

- a. The student's best five General subject results
OR
- b. The student's best results in a combination of four General subjects plus one Applied subject or Certificate III or above

Eligibility for an ATAR requires satisfactory completion of a QCAA English Subject (either English or Essential English).

Refer to Appendix for more information

TAFE Certificate.

Students may wish to undertake a TAFE Certificate in Year 11 and 12. This is possible through the Vocational Education and Training in Schools (VETiS) Program where students can study a certificate at TAFE one day per week while continuing their studies at MCC. TAFE Certificates also add to the credits required for a student to achieve a QCE. Some certificate costs are covered by the Queensland Government's VET Investment Budget and some are full fee paying certificates. For more information, please contact CQUniversity or visit their website: www.cqu.edu.au.

School Based Apprenticeship or Traineeship (SAT).

Students in Year 11 and 12 may start their apprenticeship or traineeship while they are at school. A SAT will impact on the student's timetable as they generally are required to attend paid work or training one day per week during school hours. Students and parents are required to sign the necessary paperwork with a registered Apprenticeship Agency and enter into a training agreement with a Registered Training Organisation.

Full time Apprenticeship or Traineeship.

Students may wish to leave school if they are offered a full time apprenticeship or traineeship.

Continue at school until I get a job.

The Youth Participation in Education and Training Act 2003 which came into effect in 2006 states that students must remain in school until they finish Year 10 or turn 16, whichever comes first. Students who have completed Year 10 or are 16 must stay in education and training for a further 2 years or until they have gained their QCE, a Certificate III in a vocational qualification, have turned 17 or are working a minimum of 25 hours per week. Students need to be earning or learning.

Please note: It is common for students to have part time jobs while they complete their senior studies. The Child Employment Act 2006 states that during a school week, a school-aged child can work a maximum of 12 hours per week. During a non-school school week a school-aged child can work a maximum of 38 hours per week. While it is a positive experience for students to have a part time job and earn money, it can impact on their senior studies, extra-curricular activities and family time. Balance and time management are important. Senior studies are an investment of time in a student's future.

Refer to Appendix for more information

YEAR 10 IN 2026



Year 10

We are committed to preparing all students for pathways after school and implementing new learning opportunities throughout Senior School.

Year 10 will be a significant start to this phase of learning with an emphasis on the types and styles of learning that will be required to ensure success. The core and elective subjects studied by students will provide various learning pathways that some students will study Numeracy Short Course as an alternative to Year 10 Mathematics and/or the Literacy Short Course as an alternative to Year 10 English.

For Year 10 Humanities, students will study History for semester 1 and choose one elective subject for Geography, Business and Economics and the Aboriginal and Torres Strait Islander Languages short course.

Students entering Year 11 and 12, wanting to pursue a university pathway, will need to ensure they qualify for an ATAR to gain entrance to a university course. As part of this preparation, students in Year 10 are given an opportunity to experience subjects that are closely aligned with Senior syllabuses to ensure that students are well equipped to make good choices for Year 11 and 12. In HPE, Science and Mathematics students will be placed in courses according to their performance in Year 9 Science and Mathematics. Although the majority of students will all be studying the Year 10 Australian Curriculum their learning areas for the different courses, the content will be covered at a different depth.



YEAR 10 CORE SUBJECTS





CLEAR

CLEAR is our values-based subject which supports our college values which are: Christlikeness, Learning, Excellence, Attitude and Respect.

At Mackay Christian College we are passionate about helping students grow to become all the God wants them to be.

The program has been developed with an embedded Christian world with a focus on fostering student's academic, spiritual, character and emotional development.

In Year 10 CLEAR, students are given the opportunity to engage in a range of different types of activities that help students develop social-emotional skills (confidence, organisation, persistence, getting along and resilience).

Research indicates that these five SELs are essential keys for success and personal well-being. A goal of the course is for students to become confident, empathetic student leaders.

During CLEAR, students will also develop their own SET (Senior Education and Training) plan.

This helps students to:

- structure their learning around their own abilities, interests and ambitions
- think about their education, training and career options after Year 12
- set and achieve learning goals in Years 11 and 12, and beyond
- include flexible and coordinated pathway options in their course of senior study
- communicate with their parents/carers, or college staff about their post-school plans.

ENGLISH

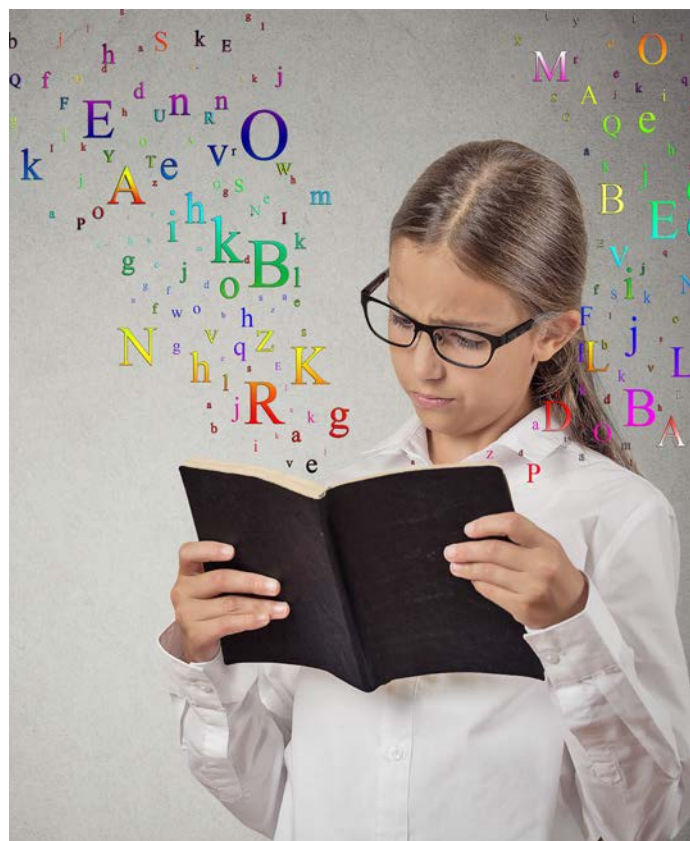
Year 10 English builds on the concepts, skills and processes developed in earlier years through increasingly complex and sophisticated texts. It lays the foundation for the compulsory study of English in Year 11 and 12, where students will be creating both analytical and creative texts that explore a variety of contemporary and traditional literature.

Short Course in Literacy

A selection of students will be invited to participate in Short Course in Literacy, based upon their Year 9 English results.

Students will learn literacy skills within a practical context. They will construct and make judgements about meanings of texts for different audiences and purposes, drawing on language from a variety of professional and industry groups.

Students are encouraged to monitor and understand their own learning and recognise the importance of literacy in the workplace. On achieving a C result or better, students will earn 1 QCE (Queensland Certificate of Education) credit.



MATHEMATICS

Students will be placed in Mathematics classes based upon their Year 9 Mathematics results. Year 10 Maths courses are given the relevant preparatory name to match Senior syllabuses.

The four Year 10 Mathematics courses are:

Mathematics: Extension

This course will provide an in-depth coverage of curriculum and also provide opportunities for extension work that is described in the optional content. This is suited for students considering Mathematical Methods or Specialist Mathematics in Years 11 and 12 and will also provide a thorough understanding of General Mathematics in Years 11 and 12.

Mathematics:

Curriculum level Year 10 Mathematics aims to cover Year 10 content with an emphasis on preparing students for General Mathematics for Senior school.

Mathematics: Essentials

A more foundational approach to Year 10 Mathematics is covered in this course, with an emphasis on preparing students for Essential Mathematics in Years 11 and 12.

Numeracy Short Course:

The Numeracy Short Course is offered to Year 10 students who have struggled to succeed with the academic rigour of the Mathematics learning area of the Year 7-9 Australian Curriculum. Students who achieve a C or better overall result in the Numeracy Short Course will earn 1 QCE (Queensland Certificate of Education) credit for their Senior schooling in Year 11 and 12.





BIOLOGY

Biology is the science about life. Students will learn Genetics and Diseases. Students wanting to pursue a career in health, amongst others, should consider Biology as one of their choices in Year 11 and 12.

CHEMISTRY

Chemistry looks at the atomic structure and the arrangement of the periodic table. Learners also study molecular bonds and chemical reactions. Students that want to pursue a career in health, amongst others, should consider Chemistry as one of their choices in Year 11 and 12.

PHYSICS

Physics is the study of matter and energy. Students will learn about motion, forces and energy and could include topics such as robotics. Students wanting to pursue engineering or science, amongst others, should consider Physics as one of their choices in Year 11 and 12.

SCIENCE

Students will be placed in Year 10 Science classes based upon their Year 9 Science results and intended career pathway.

Throughout the year, students will study different areas of Science in three rotation blocks. These are as follows:

Rotation A: Biology (Extension), Biology (Core) and General Science

Rotation B: Chemistry (Extension), Chemistry (Core) and General Science

Rotation C: Physics (Extension), Physics (Core) and General Science

The extension courses are designed to provide students with an excellent foundation for the study of Senior Science subjects in Year 11 and 12.

General Science is focused on delivering knowledge and skills in an industry or trade context.

HEALTH & PHYSICAL EDUCATION

The year 10 Health and Physical Education course provides students with the opportunity to further explore topics and physical activities that promote health, participation and performance in physical activity. The course provides a strong pathway to the study of Physical Education or Sports and Recreation in Year 11 and 12.

Students complete two of the following four units designed to prepare students for Senior Physical Education or Senior Sport and Recreation

- 1 - Risks and Challenge in Sport
- 2 - Proficiency of Sporting Movements
- 3 - Movement Concepts, Strategies and Ethics in Sport
- 4 - Coaching and Leadership in Sport

Students will participate in a variety of recreational, sporting and personal fitness activities both onsite and at specialised facilities in Mackay aiming to improve students fitness, confidence, motivation, leadership opportunities, deeper physiological knowledge of the body and cognitive sporting knowledge.

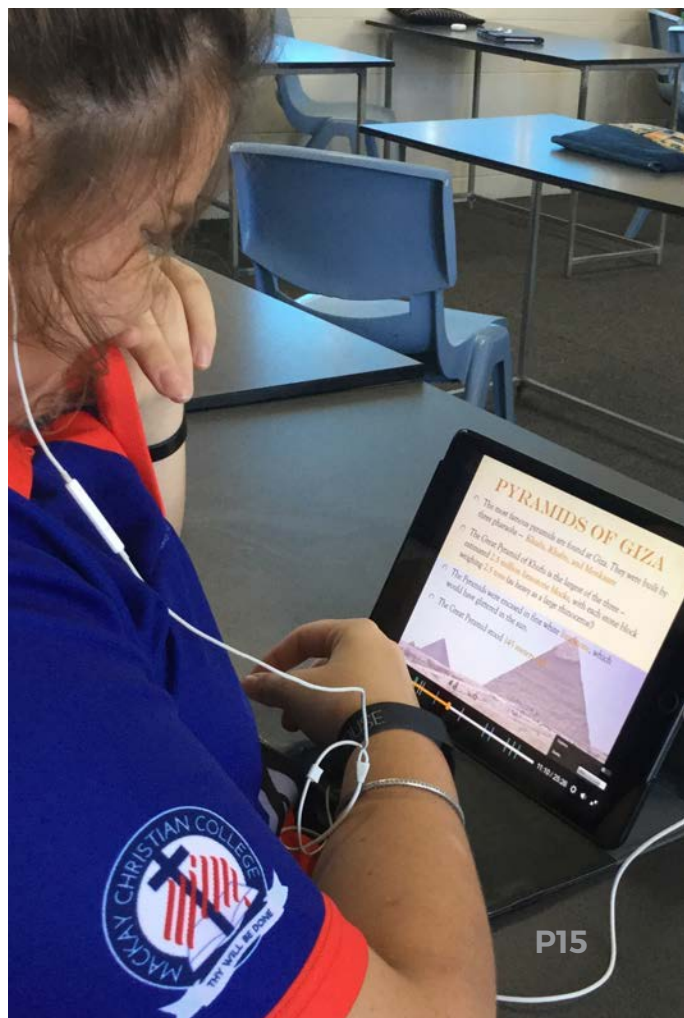


HUMANITIES

Humanities enables students to develop the capacity to question, and think creatively whilst fostering their curiosity and imagination.

Students will study History and one of the three subjects: Geography, Business and Economics and the Aboriginal and Torres Strait Islander Languages short course. We will have 2 rotations throughout the year with each course being a semester in duration.

These courses allow students to experience some of the elements and expectations of the Humanities courses (Legal Studies, Modern History, Geography and Business) offered in Year 11 and 12 and further develop the appropriate knowledge and skills bases necessary to be successful in these areas.



YEAR 10 ELECTIVE SUBJECTS



AGRICULTURE

Students will investigate solutions to feeding a growing population and learn practical, transferable skills in the Agriculture Centre. This subject provides the opportunity for students to experience animal husbandry with horses, goats, cattle and chickens. Students will also learn the appropriate and safe use of chemicals.

Agriculture in Year 10 will prepare students for Senior Agricultural Practices. Agriculture will support learning in Science, Maths and other practical subjects. Students may choose Agriculture due to interest or if they are pursuing a career in the agricultural, environmental or animal sectors.



HOME ECONOMICS

Students will study the production, processing, consumption, marketing of food, the nature of food and human nutrition, through a problem-solving process. The focus of this specialist area is on the wellbeing of individuals, families and communities.

Students will improve their cooking skills and increase their confidence in the kitchen while preparing healthy nutritional meals. Sewing will focus on sustainability of the fashion industry. Students will practice their skills in designing an upcycling project.

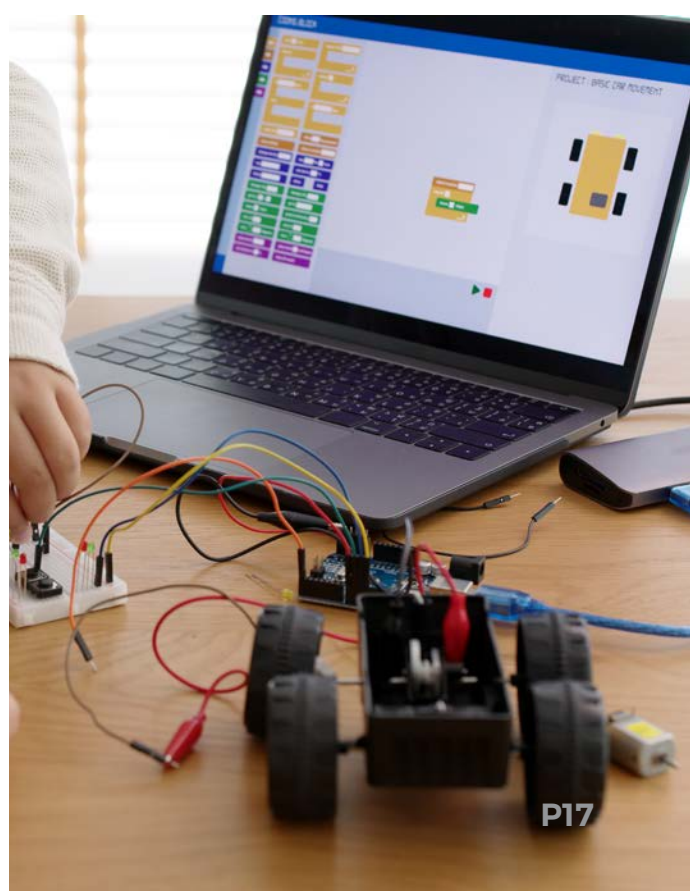
Students considering studying Hospitality Practices as part of their Senior pathways should consider this subject.

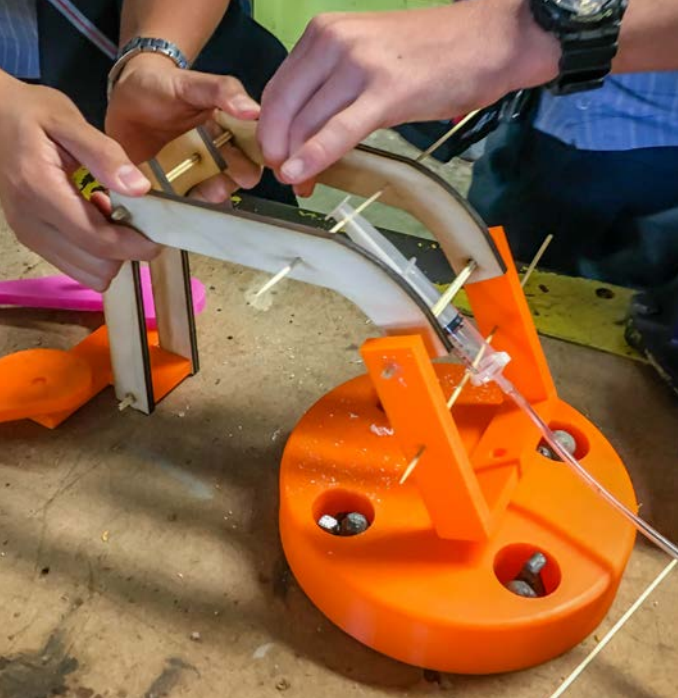


STEM

In STEM, students will develop a sophisticated understanding of the synergistic relationship between Science, Technology, Engineering, and Mathematics (STEM). This will provide a powerful framework for addressing complex global issues through advanced project- and problem-based investigations. Building upon prior knowledge, students will delve deeper into specialised areas within Digital Technologies, Physics, Chemistry, Biology, Mathematics, and Engineering to solve real-world problems.

Students design and program robots, fly and analyse drone data, use advanced 3D printing for prototypes, conduct scientific research, and develop solutions for school and community issues. Students will build crucial critical thinking, creativity, collaboration, and problem-solving skills needed for future STEM careers and being informed global citizens.





DESIGN TECHNOLOGY

Students will design, fabricate and test ideas that use new technology.

Students use Computer Aided Manufacturing (CAM) and learn the fundamentals of hydraulics and electronics. Students also have the opportunity to create and participate in a Catapult Challenge.

Design Technology will prepare students to undertake the study of Design in Year 11 and 12 and also supports learning in Physics.



INDUSTRIAL TECHNOLOGY

Students build workplace skills and test their design thinking process in Industrial Technology. This subject provides the opportunity to create solutions through design using Computer Aided Drafting (CAD) and Computer Aided Manufacturing (CAM) and then utilise a range of materials, tools, machines and processes to produce quality outcomes. Students undertaking this course may be considering the Trade Training Centre as part of their Senior Learning Pathway.

Woodwork

In Woodwork, students work on traditional furnishing projects. Students gain a good understanding of woodworking joints and technical drawings.

Metalwork

In Metalwork, students will be introduced to metals engineering trade skills. They will be working in the Trade Training Centre to complete a training journal to record the skills they have learned, where they are up to with their project and what they will be doing for the next step. They will also have the opportunity to try welding, machining and the use of hand tools to complete a project.

DRAMA

Drama is an exciting course that develops students' skills and understandings in the making of and responding to dramatic works. Innovation and creative thinking are at the forefront in Drama.

Students will study performance expression and design elements within a variety of artistic styles. They will have an opportunity to explore the expressive capacity of their voice and physical movement to create dramatic meaning for an audience. This course will prepare students for the study of Drama in Year 11 and 12.



MEDIA ARTS

Media Arts seeks to encourage and challenge students to be resilient problem solvers and creative, reflective producers of digital media content. This subject aims to bring together many digital technologies available to us, to investigate real world applications of digital and print media through the problem-solving process.

Students participating in this subject will focus on the following areas: Graphic Design and Design Principles, Digital Storytelling in different forms, Photography, Image Manipulation, and Video and Audio production skills.



MUSIC

Students will have the opportunity to develop their skills in performance, composition and responding to listening in preparation for Music in Year 11 and 12.

This is achieved through exploring a variety of music styles and techniques, including the study of Australian Art Music. This course also allows students the opportunity to develop their potential in their preferred area of musical expertise when performing and composing.



VISUAL ARTS

In Year 10 Visual Arts, students explore diverse artistic practices, deepen their understanding of visual conventions, and develop critical thinking skills through analysis and evaluation of artworks and artists. They learn to manipulate materials and techniques, build personal style, and create artworks that communicate ideas. The scope and sequence also include curating and presenting exhibitions to engage audiences.

This subject will prepare students to undertake Visual Arts in Practice or Design subjects in Year 11 and 12.



SKILLS FRAMEWORK

Critical Thinking

- Analytical thinking
- Problem solving
- Decision making
- Reasoning
- Reflecting and evaluating
- Intellectual flexibility

Creative Thinking

- Innovation
- Initiative and enterprise
- Curiosity and imagination
- Creativity
- Generating and applying new ideas
- Identifying alternatives
- Seeing and making new links

Communication

- Effective oral and written communication
- Using language, symbols and texts
- Communicating ideas effectively with diverse audiences

Collaboration & Teamwork

- Relating to others (interacting with others)
- Recognising and using diverse perspectives
- Participating and contributing
- Community connections

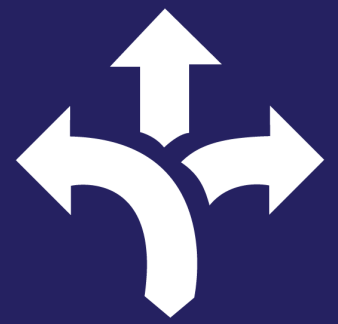
Personal & Social Skills

- Adaptability/flexibility
- Management (self, career, time, planning and organising)
- Character (resilience, mindfulness, open and fair-mindedness, self-awareness)
- Leadership
- Citizenship
- Cultural awareness

ICT Skills

- Operations and concepts
- Accessing and analysing information
- Being productive users of technology
- Digital citizenship

NOTES

[illegible]

YEAR 11 & 12 GENERAL SUBJECTS



ENGLISH



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

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 when responding to and creating literary texts and non-literary texts
- Skills to make choices about generic structures, language, textual features and technologies for in literary analysis and creation of various text types for a variety of purposes and audiences
- Enjoyment & appreciation of literary and non-literary texts.
- 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.

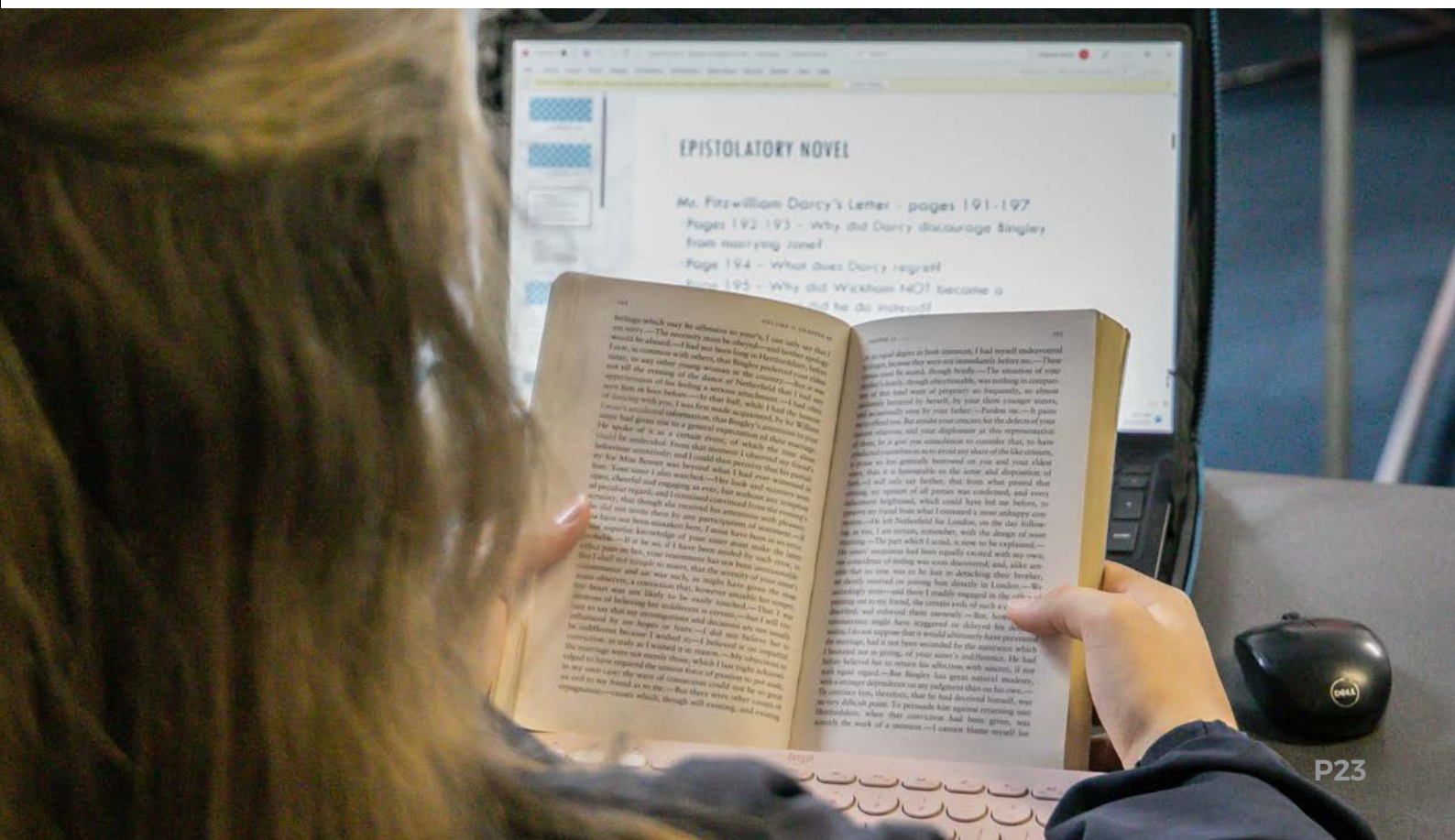
A course of study in English promotes open-mindedness, imagination, critical awareness and intellectual flexibility.

These skills prepare students for local and global citizenship, and for lifelong learning across a wide range of contexts.

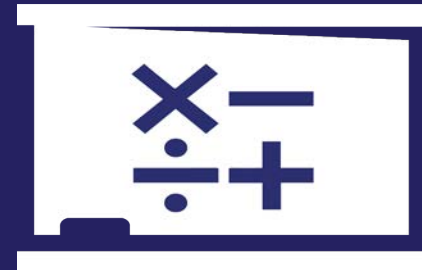
Career Opportunities:

English is an asset in almost all professions but features strongly in the following:

- Writing
- Journalism
- Librarian
- Marketing
- Law
- Social Work
- Travel
- Public Relations
- Film & Television



GENERAL MATHEMATICS



General Mathematics is designed for students who want to extend their mathematical skills. It incorporates a more detailed approach that equips learners for their needs as future citizens, preparing them for tertiary studies, vocational education or work in a complex and rapidly changing world.

Students undertaking this subject will further develop future focused skills as critical and creative thinkers, innovators and problem-solvers in an ever-changing world. They develop their ability to take initiative and promote curiosity in an increasingly complex and data driven world. Learning reinforces prior knowledge and continues to develop key mathematical ideas.

Students in Year 11 and 12 study:

- Money, measurement and relation
- Applied trigonometry, algebra, matrices and univariate data
- The use of matrices and networks to model and solve authentic problems
- Bivariate data, sequences and change and Earth Geometry
- Investing and networking

Topics are developed systematically, with increasing levels of complexity and connection as skills in patterns, order and generality and uncertainty are investigated.

Problems are explored and solved through observation, reflection and logical reasoning using a concise communication system involving written, symbolic, spoken and visual components.

A real-life application of the finance topic assists students to become well-informed consumers of loans, annuities and perpetuities to assist them in comparing products for best purpose, managing money and compound interest. It also contains foundational statistic topics that will equip students with knowledge to apply formulae to spreadsheets.

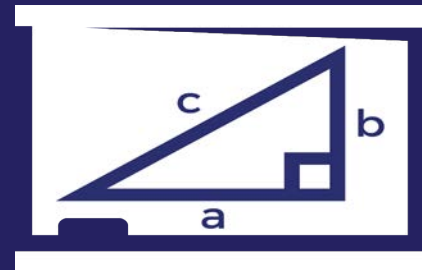
Emphasis is placed on the mastery of content, ensuring key concepts or procedures are confidently applied. This assists students to make connections between related concepts in both complex familiar and complex unfamiliar situations.

Career Opportunities:

- Business, e.g. trades, nursing, tourism and hospitality
- Commerce, e.g. administrative roles
- Education
- Finance
- IT
- Social science
- The creative industries



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 future.

The major domains of mathematics in Mathematical Methods are:

- Algebra
- Functions, relations and their graphs
- Calculus
- 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

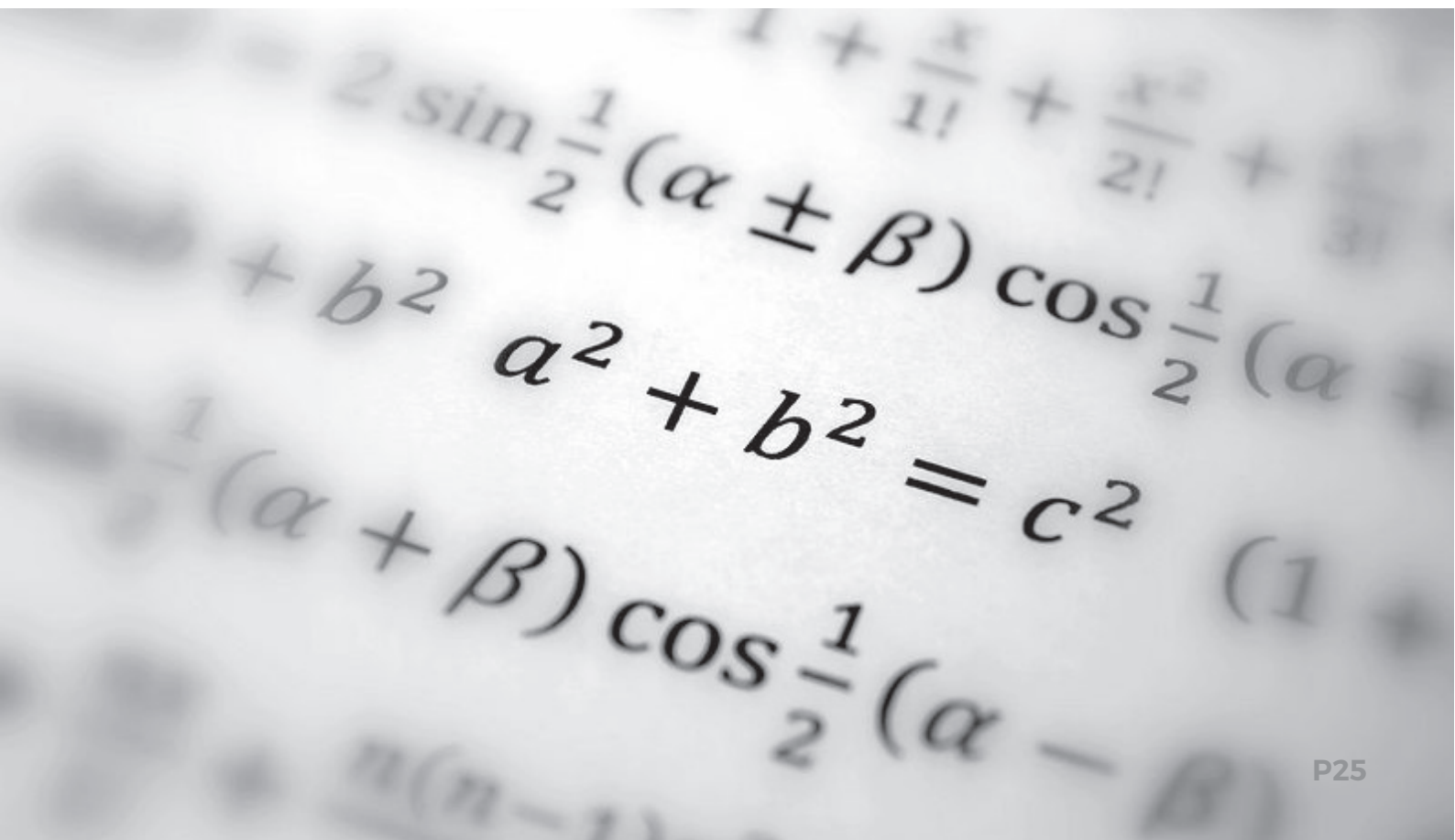
representation to another is a vital part of learning in Mathematical Methods.

Mathematical Methods is a General subject suited to students who are interested in pathways beyond school that lead to tertiary studies, vocational education or work.

Students who study Mathematical Methods in Year 11 should have achieved at least a C standard in Prep Mathematical Methods in Year 10. To be successful in Mathematical Methods, students will need to consistently work hard over the duration of the course.

Career Opportunities:

- 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



BIOLOGY



Biology provides opportunities for students to engage with living systems.

In Year 11 and 12, students:

- Develop their understanding of cells and multicellular organisms
- Engage with the concept of maintaining the internal environment
- Study biodiversity and the interconnectedness of life
- Concepts of heredity and the continuity of life
- 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 communicate biological understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

Biology aims to develop students':

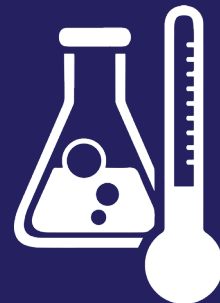
- Sense of wonder and curiosity about life
- Respect for all living things and the environment
- Understanding of how biological systems interact and are interrelated, the flow of matter and energy through and between these systems, and the processes by which they persist and change
- Understanding of major biological concepts, theories and models related to biological systems at all scales, from subcellular processes to ecosystem dynamics
- Ability to use sound, evidence-based arguments creatively and analytically when evaluating claims and applying biological knowledge

Career Opportunities:

- Life Scientist
- Anatomist
- Physiologist
- Biochemist
- Biotechnologist
- Botanist
- Marine Biologist
- Microbiologist
- Zoologist



CHEMISTRY



Chemistry is the study of materials and their properties and structure. Chemistry is often referred to as the “central science” because of its role in connecting the physical sciences, which include chemistry, with the life sciences and applied sciences such as medicine and engineering.

Senior Chemistry students participate in a range of experiments and investigations which allow for the progressive development of their suite of science inquiry skills, while gaining an enhanced appreciation of chemical structure and properties. Collaborative experimental work also helps students to develop communication, interaction, and self-management skills.

Students in Year 11 & 12 study:

- Atomic theory, chemical bonding and the structure and properties of elements and compounds
- Intermolecular forces, gases, aqueous solutions, acidity and rates of reaction
- Equilibrium processes and redox reactions
- Organic chemistry, synthesis and design

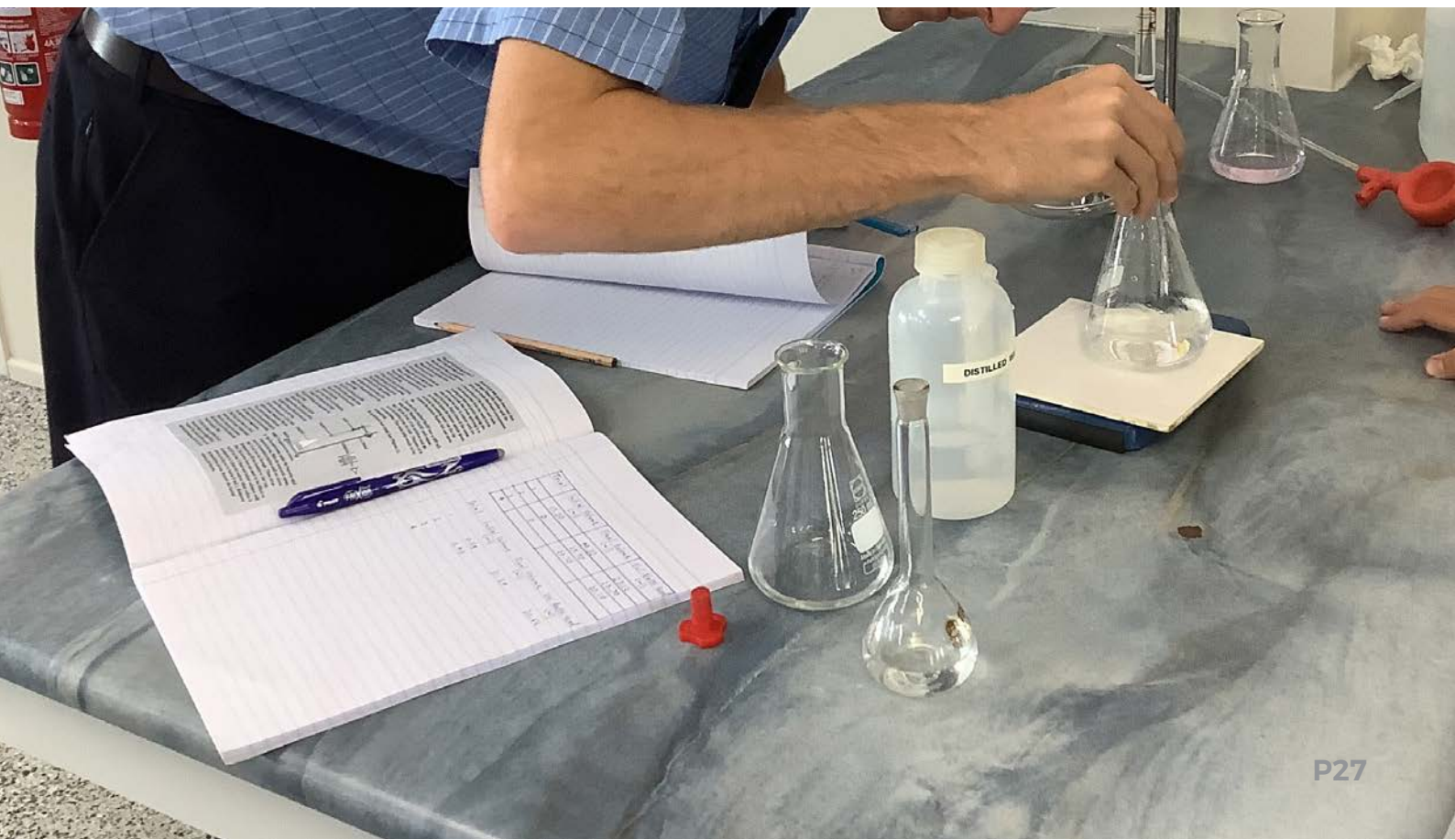
Studying Chemistry will develop students’:

- 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.

Career Opportunities:

- Research, forensic or environmental scientist
- Engineering
- Health Science - medicine, pharmacy, allied health
- Education
- Veterinary Science



DRAMA



Drama is an exciting course that develops students' performance and theoretical skills. It gives students opportunities to explore their role within an ensemble and study the design elements of technical production. Students engage in learning experiences that develop the future focused skills of critical and creative thinking, communication, collaboration and teamwork.

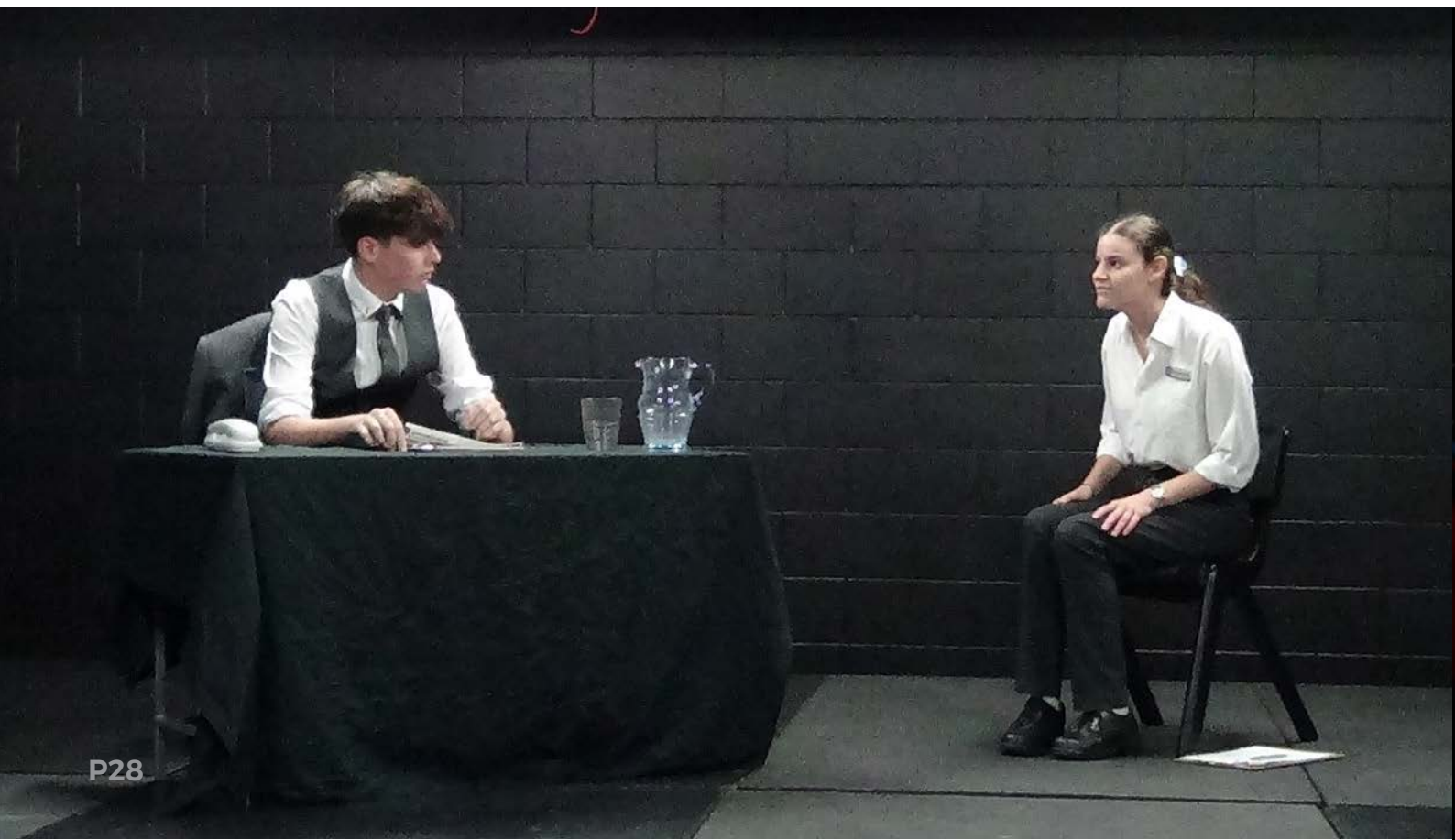
In Year 11 and 12, students study:

- How drama promotes shared understanding of the human experience (Contemporary Theatre)
- How drama is shaped to reflect the lived experience (Realism Styles)
- How to use drama to challenge our understanding of humanity (Social and Political Theatre)
- How to transform dramatic practice (from Traditional Styles to Current Practices)

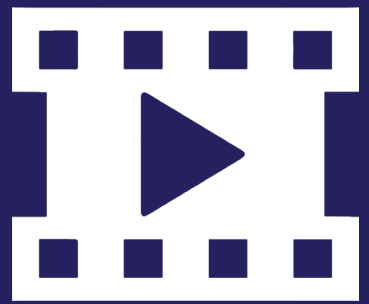
Drama engages students in creative processes and involves them using a range of artistic skills as they make and respond to dramatic works. They study a range of forms, styles and their conventions in a variety of inherited traditions, current practice and emerging trends. Students will have an opportunity to explore the expressive capacity of their voice and physical movement to create dramatic meaning for an audience.

Career Opportunities:

- Arts administration and management, e.g. artist manager, arts administrator, booking agent, copyright/royalties manager, tour manager, venue manager, events and festivals manager/producer, arts and cultural advisor/administrator
- Communication, e.g. writer, communication strategist, arts editor, blogger/vlogger
- Creative industries, e.g. professional performer, actor, director, dramaturge, independent artist, artistic director, costume designer, producer, rehearsal director, theatre technician, stage manager, dialect coach, radio presenter
- Education, e.g. educator in schools, corporate, private studios, community, universities and professional drama company education programs
- Public relations, e.g. campaign manager, publicist, creative director
- Research, e.g. researcher and academic, journalist/critic
- Science and technology, e.g. drama health professional with further specialised training in areas of medicine, health, therapy.



FILM, TV & NEW MEDIA



Film, Television & New Media uses an inquiry learning model, developing critical thinking skills and creative capabilities through the exploration of five key concepts that operate in the contexts of production and use.

The key concepts of technologies, representations, audiences, institutions and languages are drawn from a range of contemporary media theories and practices. Students will creatively apply Film, Television and New Media key concepts to individually and collaboratively make moving-image media products, and will investigate and respond to moving-image media content and production contexts.

In Year 11 and 12, students will:

- Develop knowledge and skills in creative thinking, communication, collaboration, planning, critical analysis and digital and ethical citizenship
- Develop the necessary critical and creative skills to reflect on and appreciate Australian and global cultures and make sense of what they see and experience, providing highly transferrable flexible thinking and communication skills.

Career Opportunities:

- Advertising, art director, brand specialist and graphic artist
- Film and Television, storyboard artist, producer and camera operator
- Public Relations, publicist, creative director and campaign manager
- Creative industries eg. animator, photographer, game developer and screenwriter
- Education
- Writer, journalist, blogger/vlogger and web content designer
- Graphic designer, set designer or stage designer



GEOGRAPHY



Within Geography students engage with the physical and human environments through both practical and theoretical learning systems. The students undertake fieldwork investigations of local issues as a building block to understanding the geographical challenges and their effects at both a local and global level.

Students are exposed to a wide variety of contemporary and engaging real world challenges and will analyse these issues on a variety of scales from the local to the global. The main challenges students will encounter include responding to the risks of natural hazards such as tropical cyclones and volcanoes, managing the land cover transformations and the impacts of humans on our environment and planning for a growing modern population. Case studies of a wide range of cultures, people and places will be investigated to widen student perspectives and develop their understanding of the wider world.

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.

Students will also learn skills acquired through understanding and using spatial technologies such as ArcGIS.

Career Opportunities:

- 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
- Engineering
- Information technology, and science
- Geospatial Technologies
- Geology
- National Park Service (Park Ranger)



LITERATURE



The subject Literature focuses on the study of 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 literary texts.

In studying Literature, students will learn about:

- introduction to literary studies
- texts and culture
- literature and identity
- independent explorations

The subject Literature is suitable for students who enjoy reading, analysing literature, and crafting their own stories and multimodal creations.

In this course, students will be given the opportunity to:

- read and analyse literature
- read and discuss literary critics' interpretations of literature
- write analytical essays
- develop their own creative writing
- produce multimodal adaptations of literary texts.

A course of study in Literature will assist students to develop a deeper appreciation for literature and help to refine their own writing and creativity.

Literature is a General subject suited to students who are interested in pathways beyond school that lead to tertiary studies, vocational education or work. A course of study in Literature 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.

Career Opportunities:

English is an asset in almost all professions but features strongly in the following:

- Writing
- Journalism
- Librarian
- Marketing
- Law
- Social Work
- Travel
- Public Relations
- Film & Television



MODERN HISTORY



"The more you know about the past, the better prepared you are for the future"- Theodore Roosevelt

Modern History at Mackay Christian College 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 think historically and form a historical consciousness in relation to these same forces.

Both aims complement and build on the learning covered in the Australian Curriculum: Year 7–10 History. 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.

The second aim is achieved through the rigorous application of historical concepts and historical skills across the syllabus. To fulfil both aims, Modern History uses a model of inquiry learning.

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 future focused 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.

Career Opportunities:

- Historian / Museum Attendant
- Museum attendant
- Librarian
- Law clerk
- Writer
- Parliamentarian
- Tour guide
- Teacher
- Journalist
- Business / Economist



PHYSICAL EDUCATION



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

Units of study include:

- Motor Learning, Functional Anatomy and Biomechanics
- Sport Psychology and Equity
- Tactical Awareness, Ethics and Integrity
- Energy, Fitness and Training

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.

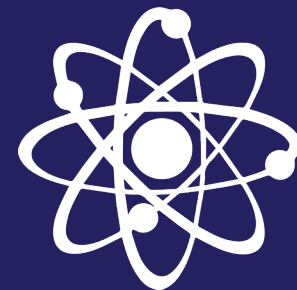
Schools devise assessments in Year 11 for two units to suit their context, including two Project – folio assessments, one Investigation – Report assessment and one internal examination. In Year 12 students complete four summative assessments including one external examination.

Career Opportunities:

- Sports and Exercise Science
- Sport Psychology
- Biomechanics of Sport
- Primary or Secondary Teaching
- Sports Journalism
- Sports Therapies
- Sport Marketing, promotion, and management
- Event Management
- Sports Development and Coaching



PHYSICS



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

In Year 11 and 12, students learn about:

- Fundamental concepts of thermodynamics, electricity and nuclear processes
- Concepts and theories that predict and describe the linear motion of objects. They will explore how scientists explain some phenomena using an understanding of waves
- The concept of gravitational and electromagnetic fields, and the relevant forces associated with them
- Modern physics theories and models that, despite being counterintuitive, are fundamental to our understanding of many common observable phenomena

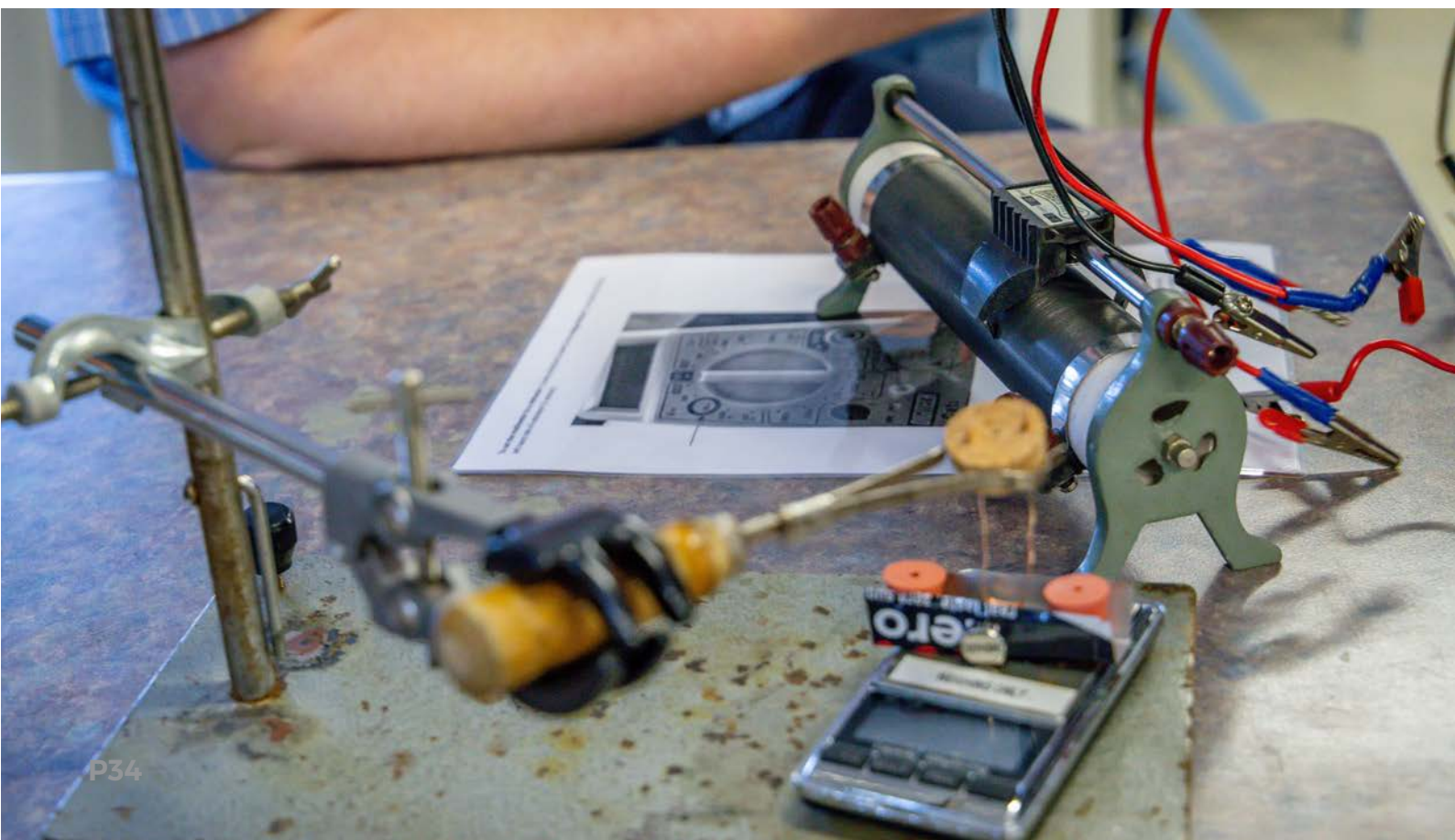
Physics aims to develop students':

- 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
- 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 skepticism and intellectual rigour to evaluate claims
- Ability to communicate physics understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

Career Opportunities:

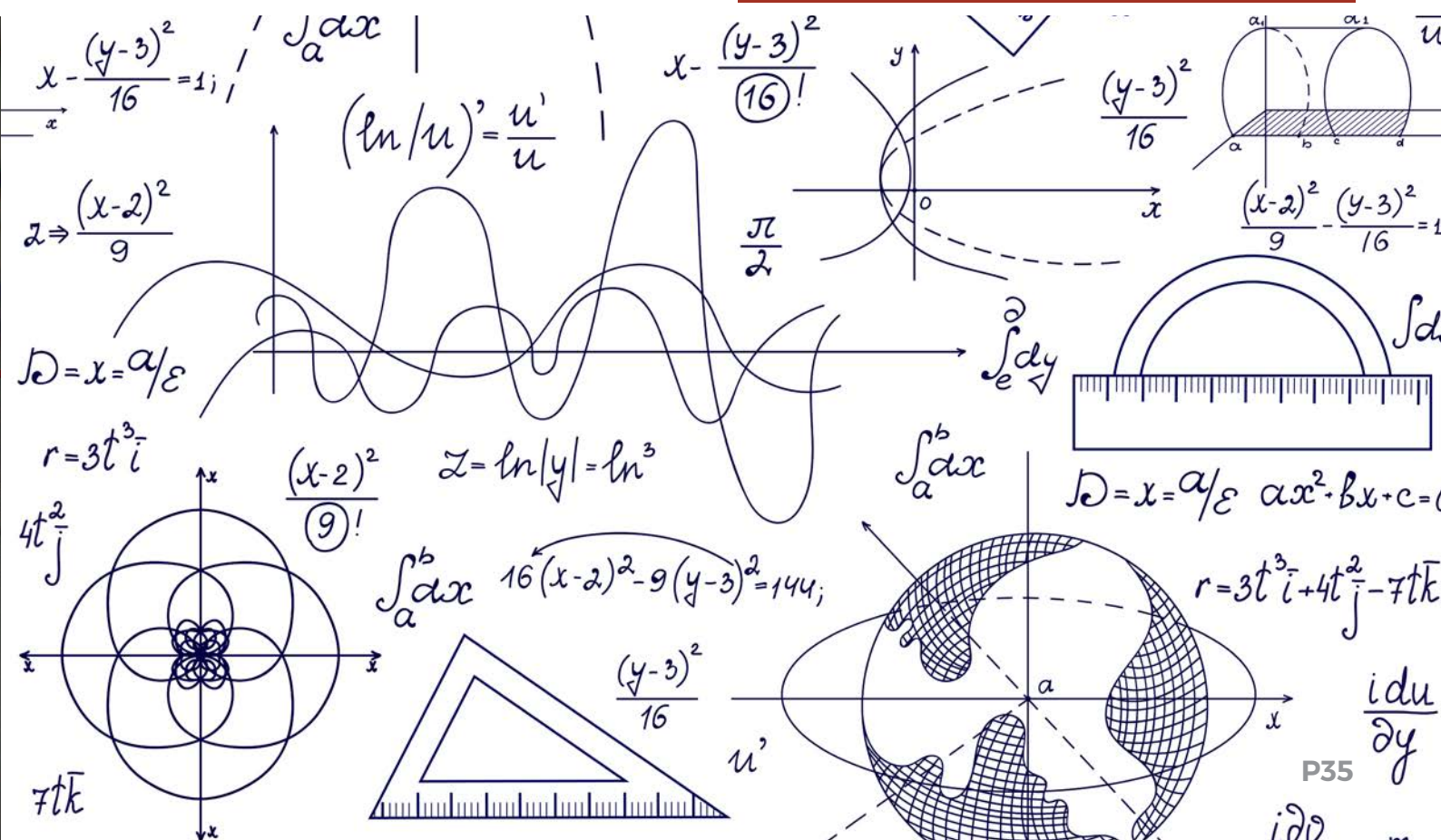
- Accelerator Operator
- Applications Engineer
- Data Analyst
- Design Engineer
- Physics Teacher
- IT Consultant
- Lab Technician
- Laser Engineer/Optical Engineer
- Research Associate
- IT Developer/Systems Analyst



$$E = MC^2$$

Specialist Mathematics is a subject suited to students with a passion for Mathematics. Students need to have achieved at least a C+ standard in Prep Mathematical Methods in Year 10, and be interested in tertiary studies beyond Year 12 with a Mathematics, Science or Education base.

- Engineering
- Aviation
- Medicine and Health Sciences
- Education
- Mathematician
- Computer Science
- Economics



STUDY OF RELIGION



You have set eternity in the hearts of man.
Ecclesiastes 3:11.

Since the beginning of time humanity has sought meaning, seeking the answers to the great questions of purpose, creation and eternity. In this course we will explore these powerful belief systems that have shaped the globe.

It is a compelling story of brokenness and conflict, as well as healing and hope. Throughout the Studies of Religion course, students will engage with a wide array of thought-provoking topics, including:
Sacred Texts and religious writings:

In Unit 1, students are introduced to the five major world religions of:

- Judaism,
- Christianity,
- Islam,
- Hinduism, and
- Buddhism, and to
- Australian Aboriginal spiritualities, as a foundation to the course of study.

Religion and Ritual: In Unit 2, students build on their understandings of Judaism, Christianity, Islam, Hinduism,

Buddhism, Australian Aboriginal spiritualities and Torres Strait Islander religion as they investigate religious rituals that mark significant moments and events in the religion itself and in the lives of adherents.

Religious Ethics: In this unit students study the religious foundations that form and inform ethical principles within different religious traditions. Students apply religious-ethical principles and theories to real-life contexts and evaluate how they influence people, society and culture.

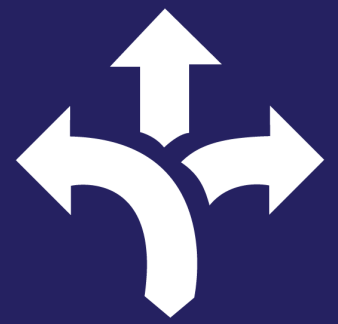
Religion, rights, and the nation state: In Unit 4, students consider how religion affects and influences people's understanding of culture, history, politics, and social interaction. Within this context, issues of rights and religion-state relationships are considered. Students investigate how religions seek to shape or are shaped by their social, cultural, and political contexts.

By exploring these key themes and topics, students will gain a deeper understanding of the multifaceted nature of religion and its profound impact on individuals, communities, and the world at large.

Reference: QCAA 2019, Studies of Religion Syllabus.



NOTES

[illegible]

YEAR 11 & 12 APPLIED SUBJECTS



ESSENTIAL ENGLISH



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.

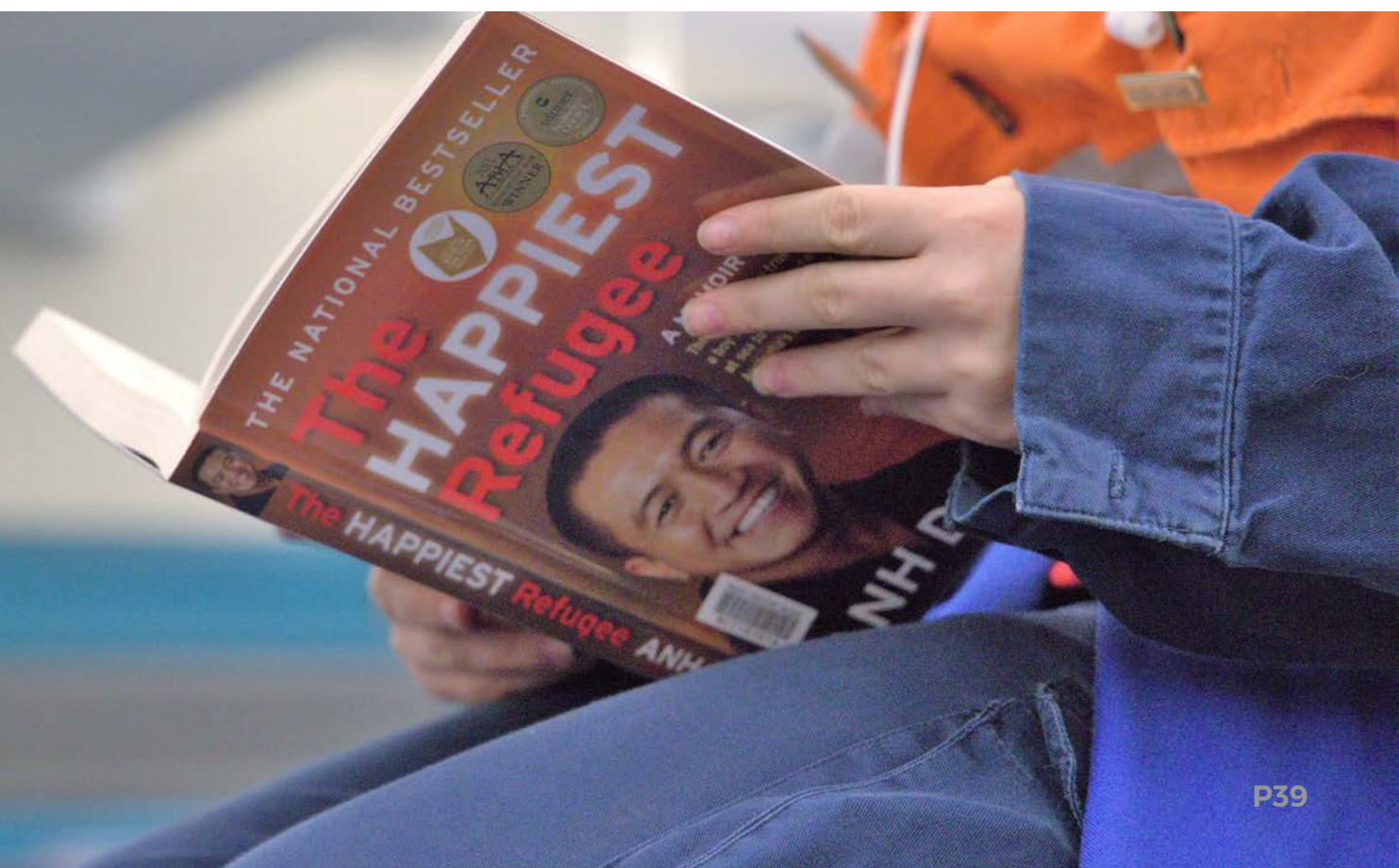
Students have opportunities to engage with language and texts through a range of teaching and learning experiences to foster:

- 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, explain 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

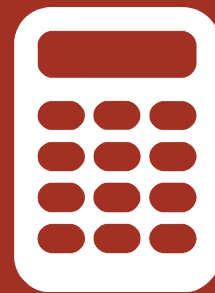
- Creative and imaginative thinking to explore their own world and the worlds of others
- Active and critical interaction with a range of texts, and an awareness of how the language they engage with positions them and others
- Empathy for others and appreciation of different perspectives through a study of a range of texts from diverse cultures, including Australian texts by Aboriginal and/or Torres Strait Islander writers
- Enjoyment of contemporary literary and non-literary texts, including digital texts.

Career Opportunities:

- Administration assistant
- Education aide
- Hospitality
- Retail
- Child care
- Transcription typist
- Tour guide
- Trades



ESSENTIAL MATHEMATICS



Students undertaking this subject will further develop future focused skills as critical and creative thinkers, innovators and problem-solvers in an ever-changing world.

They develop their ability to take initiative and promote curiosity in an increasingly complex and data driven world. Learning reinforces prior knowledge and continues to develop key mathematical ideas.

Essential Mathematics has four units, each of which contain a number of topics. Topics are taught in a context relevant to students' needs and interests. Students use their knowledge and skills to investigate realistic problems of interest which involve the application of mathematical relationships and concepts.

Students use their knowledge and skills to investigate real life problems which involve the application of mathematical relationships and concepts.

Essential Mathematics is designed for students who need to continue developing their fundamental mathematical skills. It incorporates a practical approach that equips learners for their needs as future citizens, preparing them for vocational education or work in a rapidly changing world.

Emphasis is placed on the competency of content, ensuring key concepts or procedures are learnt. This assists students to make connections between related concepts and complex familiar situations.

Career Opportunities:

- Trades
- Industry
- Business
- Community Services

AGRICULTURAL PRACTICES



Agricultural Practices provides opportunities for students to explore, experience and learn concepts and practical skills valued in agricultural science, workplaces and other settings.

Through the two year course of student Agricultural Practices students will develop their skills in the following areas:

- creative and critical reasoning
- explanation and execution of procedures
- planning and implementation of projects and investigations
- systematic collection and analysis of data
- use of digital technologies to undertake research
- evaluation of information, procedures and conclusions

Projects and investigations are key features of Agricultural Practices. 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 agricultural contexts.

Agricultural Practices students build their understanding of expectations for work in agricultural settings and develop an understanding of career pathways, jobs and other opportunities available for participating in and contributing to agricultural activities. 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 agricultural situations.

Career Opportunities:

- Agriculture
- Aquaculture
- Food Technology
- Environmental Management
- Agribusiness



BUILDING & CONSTRUCTION SKILLS



The Building and Construction Skills subject focuses on the underpinning industry practices and construction processes required to create, maintain and repair the built environment. It provides a unique opportunity for students to experience the challenge and personal satisfaction of undertaking practical work while developing beneficial vocational and life skills.

The new Building and Construction Skills Syllabus covers four units of study across the year including:

- Site preparation and foundations
- Framing and cladding
- Fixing and finishing
- Construction in the domestic building industry

Through both individual and collaborative learning experiences, students learn to meet customer expectations of quality at a specific price and time. The majority of learning is done through construction 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.

By doing construction tasks, students develop transferable skills relevant to a range of industry-based electives and future employment opportunities.

They understand industry practices, interpret specifications, including information and drawings, safely demonstrate fundamental construction skills and apply skills and procedures with hand/power tools and equipment, communicate using oral, written and graphical modes, organise, calculate and plan construction processes and evaluate the structures they create using predefined specifications.

Career Opportunities:

Building and Construction Skills can establish a basis for further education and employment in civil, residential or commercial building and construction fields. These include roles such as:

- Bricklayer
- Plasterer
- Concreter
- Painter and Decorator
- Carpenter
- Joiner
- Roof Tiler
- Plumber
- Steel Fixer
- Landscaper
- Electrician



BUSINESS STUDIES



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

This course focuses on business essentials and communication skills delivered through business contexts. Students will explore business concepts and develop practices to produce solutions to real life or simulated problems.

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.

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.

Career Opportunities:

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
- Marketing



EARLY CHILDHOOD STUDIES



Early Childhood Studies focuses on learning about children aged from birth to five years, and encourages students to be advocates for the wellbeing of children by appreciating the significance of these interactions in order to help children develop into confident, independent and caring adults.

Early Childhood Studies draws upon the Early Years Learning Framework for Australia.

The course of study involves learning about core concepts and ideas related to the fundamentals of early childhood, and practices in early childhood learning. Core topics are embedded in electives that influence the development of children, such as play and creativity, literacy and numeracy skills, being in a safe place, health and physical wellbeing, and indoor and outdoor learning environments. Throughout the course of study, students make decisions and solve problems, and work individually and with others. Throughout the course of study, students make decisions, solve problems, work individually and as part of small teams.

Students examine the interrelatedness of core concepts and ideas of the fundamentals and practices of early childhood learning.

Students are able to implement concepts learnt during class into our fortnightly visits to our Early Years Learning Centre on Junior Campus. Students prepare age appropriate activities that connect to the Early Years Framework for Australia.

This enables students to develop their understanding of the multifaceted, diverse and significant nature of early childhood learning.

Career Opportunities:

Early Childhood Studies can establish a basis for further education and employment in:

- Health
- Community Services
- Education
- Early Childhood Educators
- Teacher's Aide
- Assistants in early childhood settings, childcare facilities, kindergartens and early learning centres.



HOSPITALITY PRACTICES



The Hospitality industry is important economically and socially in Australian society and is one of the largest employers in the country. Hospitality Practices 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. Through both individual and collaborative learning experiences, students learn to perform production and service skills, and meet customer expectations of quality in event contexts.

Hospitality Practices students will develop the following skills:

- 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
- Organise, plan, evaluate and adapt production processes for the events they implement.

The subject will help students to become adaptable, competent, self-motivated and safe individuals who can work with colleagues to solve problems and practical work.

The course of study in Hospitality Practices can establish a basis for employment in the following industries:

Career Opportunities:

- Business Management
- Hospitality sectors of food and beverage
- Catering
- Accommodation
- Entertainment
- Tourism



INDUSTRIAL GRAPHICS SKILLS



Industrial Graphics is a subject for students who want to develop their graphical communication skills both in freehand sketching and Computer Aided Drafting (CAD).

Students learn job-ready skills through industry based assessments. They will develop their knowledge and skills by undertaking a number of real world drafting challenges in a range of contexts for a variety of end users. The diversity of learning activities will cater to the range of learning styles.

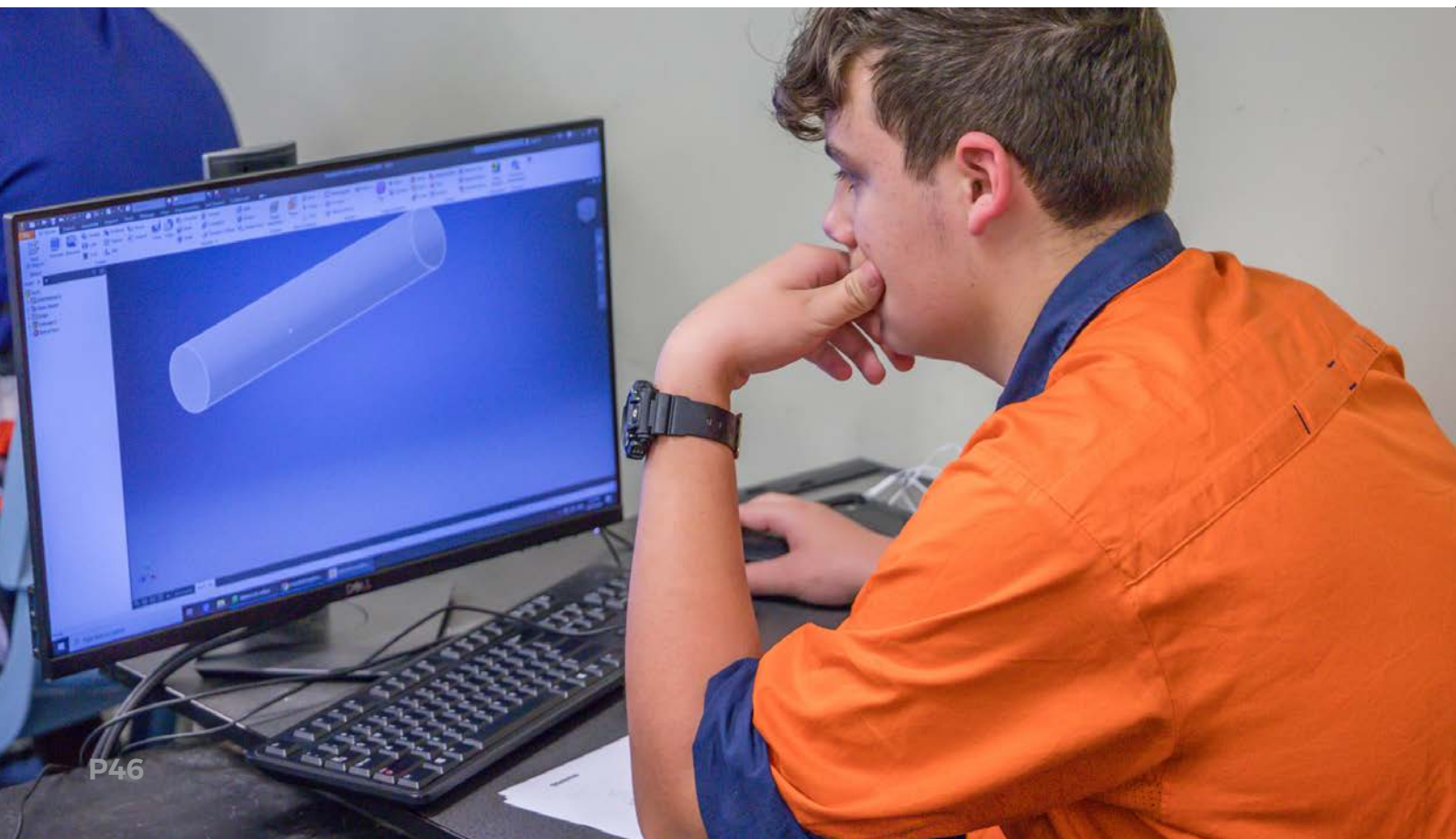
Students will develop the ability to establish and share ideas with others. They will expand the knowledge and skill required to produce drawings and information with enough detail to allow the manufacture of the product they have drafted.

In Year 11 and 12, students learn to:

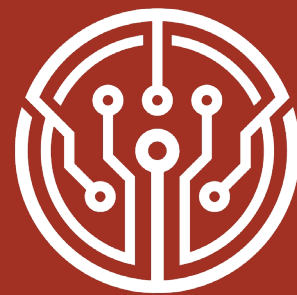
- Use information to read, interpret and produce formal CAD drawings in both 2D and 3D formats to an acceptable industry standard and conventions. Students manipulate the information gathered and developed into formats that will allow it to be passed to an end user for the manufacture or construction of a product. They will work in both engineering and construction environments.

Career Opportunities:

- Builder
- Engineer
- Carpenter
- Cabinet Maker
- Electrician
- Boilermaker
- Draftsperson
- Interior Designer
- Landscape Designer



INFORMATION COMMUNICATION TECHNOLOGY



The subject Information and Communication Technology (ICT) focuses on the knowledge, understanding and skills related to engagement with information and communication technology through contexts derived from work, study and leisure environments of today.

Across business, industry, government, education and leisure sectors, rapidly changing ICT practices and protocols create corresponding vocational opportunities.

To enable students to take advantage of these opportunities, this subject area will equip them with:

- Knowledge of current and emerging hardware and software combinations
- An understanding of how to apply them in real-world contexts and
- The skills to use them to solve technical and/or creative problems.

More specifically the subject will focus on these units:

- Graphic Design
- Photography and image manipulation
- Video production
- Special Effects
- Privacy in a digital world
- Desktop publishing

Through these units students will explore concepts and develop understanding and skills relating to:

- Digital imaging and modelling
- Document production
- Data management
- Animation
- Audio and video production
- Online communication

Career Opportunities:

- Digital Media Support
- Graphic Designer
- Photographer
- Digital Content Manager
- Office Administration
- Sales Support
- Digital Content Creator
- Marketing and Advertising



SPORT & RECREATION



Sport and Recreation activities are an intrinsic part of Australian life and culture, for many people, participation in Sport and Recreation activities in a combination of competitive, aquatic, community recreation, fitness and outdoor recreation can make a positive contribution to a students' wellbeing. 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 to enhance their own lives and others in the community.

The skills developed in Sport and Recreation may be oriented toward work, personal fitness and general health and wellbeing for the future. 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.

There is a clear link between the 2024 Curriculum and the 2032 Olympic and Paralympic Games.

The two-year Sport and Recreation course has a four-unit course of study:

1. Aquatic Recreation
2. Fitness for Sport and Recreation
3. Optimising Performance
4. Challenge in the Outdoors.

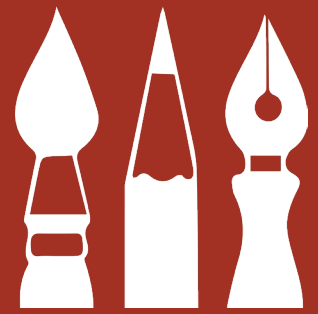
Students are required to complete two assessment tasks for each unit, a Performance and Project assessment. For each assessment students will Investigate, Plan, Perform and Evaluate outcomes in the context of the unit. Students will be expected to work individually and at times in small groups, complete a combination of multimodal, written and spoken streams of assessment.

Career Opportunities:

- Fitness and Coaching Instruction
- Personal Training
- Sports Management
- Recreational Sports Officer in Government
- Community or Commercial organisations
- Sports Analyst
- Recreational Officer
- Sports Development Officer
- Exercise Physiologist



VISUAL ARTS IN PRACTICE



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 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.

The course is designed to help students develop their knowledge, understanding and skills in the following:

- use analytical processes to identify problems and develop plans or designs for artworks.
- use reasoning and decision-making to justify their choices, reflecting and evaluating on the success of their own and others' art-making.
- examine visual features to communicate artistic intention.
- Independently select media, technologies and skills as they make experimental and resolved artworks, synthesising ideas developed throughout the responding phase.

Learning 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.

Career Opportunities:

- Interior Design
- Styling & Decorating
- Costume Design
- Illustrating
- Floristry
- Visual Merchandising
- Make up artistry
- Advertising
- Photography
- Photographer
- Self Employed Artist
- Teacher
- Advertising
- Photography
- Photographer
- Self Employed Artist
- Teacher



VOCATIONAL LEARNING CERTIFICATES



CERTIFICATE III IN HEALTH SERVICES ASSISTANCE (HLT33115)



This certificate is run in partnership with IVET (RTO Code: 40548) providing students with basic skills for a career in allied health as well as providing a pathway for those wishing to pursue further studies in this field. This certificate is completed over 2 years.

Students have access to a purpose build online simulated workplace via the 'IVET Super Clinic' which is an integral facet of the learning and assessment process immersing students in current industry practices, regulations and policies that are implemented in the Health Service Industry.

Students engage in theoretical and practical skills across the following learning areas: Australian healthcare system, interpreting and applying medical terminology, healthy body systems, assisting with movement, communicating with clients, and infection control and prevention. Students also have the opportunity to engage in work placement.

Refer to Appendix for course module details

Career Opportunities:

- Nursing Assistant
- Ward Assistant and Orderly
- Health professional assistances such as Medical Receptionists and Dental Assistants
- Allied Health Roles



TRADE TRAINING CENTRE



The Mackay Christian College Trade Training Centre (MCCTTC) is an exciting facility that provides opportunity for students who enjoy practical learning and have a desire to learn more about the Construction and Engineering industries.

Trade Pathway

The MCCTTC Trade Pathway program is focused on three core aspects: work readiness, safety, and employability. This program is specifically tailored to meet the current needs of industry and to equip and prepare students for their preferred career choice.

Students who wish to participate in this program full time will need to select Building & Construction Skills and MEM20413 Certificate II in Engineering Pathways along with Industrial Graphics. Students are then able to select any subject on the remaining elective line. Students who choose to participate in this program will be expected to be at school and working by 7:00am when specified, and to take full advantage of work placement opportunities with local companies, businesses and organisations.

Individuals who choose to apply for a Trade Pathway will need to attend an interview with a parent/carer and Director of the Trade Training Centre.

This is to ensure that the participant and their parent/carer are fully aware of the processes and expectations of the TTC program.

Single Pathway

MCCTTC also offers a single pathway option to those students who are not necessarily seeking a job in the trade industry but want to learn some practical skills or those who are hoping to study in one of these fields at university or TAFE after school.

Industrial Technology Skills is offered as Single Pathway. Students undertaking this subject are encouraged to choose the Industrial Graphics subject to support this option. Students who choose to participate in this program will be expected to be at school and working by 7:00am when specified.

Individuals who choose to apply to become a Single Pathway student will need to apply through the normal subject selection process and are also required to attend an interview with a parent/carer and the Director of the Trade Training Centre. This is to ensure that the participant and their parent/carer are fully aware of program outlines, processes, and expectations.



MEM20413 Certificate II in Engineering Pathways



The MEM20413 Certificate II in Engineering Pathways is a nationally recognised qualification providing foundational skills that open students up to the world of Engineering and Manufacturing.

This Certificate is run in partnership with Formula Student (RTO Code: 41124) and has been designed as a project-based or activity-based certificate with the emphasis on using current industry practice and safe technological processes to complete tasks through the fabrication and construction of a Formula High School® race car in a workshop or simulated workplace environment.

Projects and practical activities set the context within which the key elements of the certificate are delivered and provide the means for the consolidation and application of skills and knowledge.

Skills taught are authentic and credible. Students are instructed by the trainers and/or carry out blended learning, utilising video instruction to gain an understanding of the task plus underpinning knowledge and skill of what is required as an outcome. The student is assigned a task to manufacture, and the steps required to achieve the outcome. The component manufacture is broken down into the various step by step work tasks.

The certificate is designed to develop knowledge and skills within the engineering and manufacturing industry, from the language used, to the processes and methods, and the quality assurances around building an item for consumer usage. The training is flexible to accommodate new and emerging technologies in the manufacturing industries and the wide range of interests and abilities of the students who study it.



Career Opportunities:

- Boilermaker
- Fitter and Turner
- Technicians and Trades Workers
- Metal Fabricator
- Machinist
- Heavy Vehicle Mechanic
- Light Vehicle Mechanic



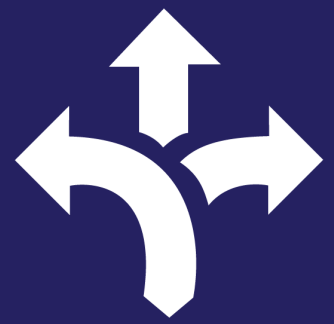
NOTES

[illegible]

PLANNING YOUR FUTURE



EMPLOYABILITY SKILLS FRAMEWORK



The following skills are the ones that employer groups said that they looked for in employees.

You can use this list to keep track of the skills you are learning. Write down times when you have shown these skills either at school or at home. This then becomes a great start to your resume.

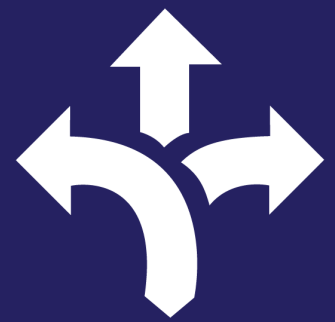
Skill	Element (facets of the skill that employers identified as important, noting that the mix and priority of these facets would vary from job to job)	Some evidence or events where you have demonstrated these skills
Communication that contributes to productive and harmonious relations between employees and customers	<ul style="list-style-type: none"> • Listening and understanding • Speaking clearly and directly • Writing to the needs of the audience • Negotiating responsively • Reading independently • Empathising • Using numeracy effectively • Understanding the needs of internal and external customers • Persuading effectively • Establishing and using networks • Being assertive • Sharing information • Speaking and writing in languages other than English 	
Teamwork that contributes to productive working relationships and outcomes	<ul style="list-style-type: none"> • Working with people of different ages, gender, race, religion or political persuasion • Working as an individual and as a member of a team • Knowing how to define a role as part of a team • Applying teamwork skills to a range of situations, eg. futures planning, crisis problem solving • Identifying the strengths of team members • Coaching, mentoring and giving feedback 	
Problem solving that contributes to productive outcomes	<ul style="list-style-type: none"> • Developing creative, innovative solutions • Developing practical solutions • Showing independence and initiative in identifying problems and solving them • Solving problems in teams • Applying a range of strategies to problem solving • Using mathematics including budgeting and financial management to solve problems • Applying problem-solving strategies across a range of areas • Testing assumptions taking the context of data and circumstances into account • Resolving customer concerns in relation to complex project issues 	

Skill	Element (facets of the skill that employers identified as important, noting that the mix and priority of these facets would vary from job to job)	Some evidence or events where you have demonstrated these skills
Initiative and enterprise that contribute to innovative outcomes	<ul style="list-style-type: none"> • <i>Adapting to new situations</i> • <i>Developing a strategic, creative, long-term vision</i> • <i>Being creative</i> • <i>Identifying opportunities not obvious to others</i> • <i>Translating ideas into action</i> • <i>Generating a range of options</i> • <i>Initiating innovative solutions</i> 	
Planning and organising that contribute to long term and short term strategic planning	<ul style="list-style-type: none"> • <i>Managing time and priorities – setting timelines, coordinating tasks for self and with others</i> • <i>Being resourceful</i> • <i>Taking initiative and making decisions</i> • <i>Adapting resource allocations to cope with contingencies</i> • <i>Establishing clear project goals and deliverables</i> • <i>Allocating people and other resources to tasks</i> • <i>Planning the use of resources including time management</i> • <i>Participating in continuous improvement and planning processes</i> • <i>Developing a vision and a proactive plan to accompany it</i> • <i>Predicting – weighing up risk, evaluating alternatives and applying evaluation criteria</i> • <i>Collecting, analysing and organising information</i> • <i>Understanding basic business systems and their relationships</i> 	
Self-management that contributes to employee satisfaction and growth	<ul style="list-style-type: none"> • <i>Having a personal vision and goals</i> • <i>Evaluating and monitoring own performance</i> • <i>Having knowledge and confidence in own ideas and vision</i> • <i>Articulating own ideas and vision</i> • <i>Taking responsibility</i> 	
Learning that contributes to ongoing improvement and expansion in employee and company operations and outcomes	<ul style="list-style-type: none"> • <i>Managing own learning</i> • <i>Contributing to the learning community at the workplace</i> • <i>Using a range of mediums to learn – mentoring, peer support, networking, information technology (IT), courses</i> • <i>Applying learning to 'technical' issues (eg. learning about products) and 'people' issues (eg. interpersonal and cultural aspects of work)</i> • <i>Having enthusiasm for ongoing learning</i> • <i>Being willing to learn in any setting – on and off the job</i> • <i>Being open to new ideas and techniques</i> • <i>Being prepared to invest time and effort in learning new skills</i> • <i>Acknowledging the need to learn in order to accommodate change</i> 	
Technology that contributes to effective execution of tasks	<ul style="list-style-type: none"> • <i>Having a range of basic IT skills</i> • <i>Applying IT as a management tool</i> • <i>Using IT to organise data</i> • <i>Being willing to learn new IT skills</i> • <i>Having the occupational health and safety knowledge to apply technology</i> • <i>Having the appropriate physical capacity</i> 	

APPENDIX



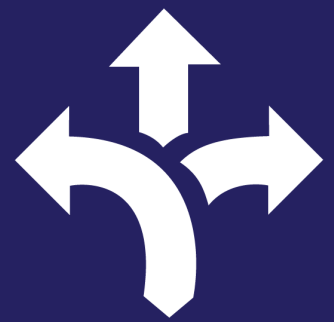
List of Competencies for Mem20413 Certificate II in Engineering Pathways



Code	Title
MEM13014A	Apply principles of OH&S in the work environment (CORE UNIT)
MEMPE005A	Develop a career plan for the engineering and manufacturing industry (CORE UNIT)
MEMPE006A	Undertake a basic engineering project (CORE UNIT)
MSAENV272B	Participate in environmentally sustainable work practices (CORE UNIT)
MEMPE004A	Use fabrication equipment
MSAPMUSP106A	Work in a team
MEM16006A	Organise and communicate information
MEM16008A	Interact with computer technology
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
MEMPE001A	Use engineering workshop machines
MEMPE002A	Use electric welding machines

YEAR 11

List of Competencies for Certificate II in Health Support Services (HLT23221)



UNIT CODE	TITLE
CHCCOM005	Communicate and work in health or community services
BSBPEF202	Plan and apply time management
BSBINS201	Process and maintain workplace information
HLTWHS001	Participate in workplace health and safety
CHCDIV001	Work with diverse people
HLTINF006	Apply basic principles and practices of infection prevention and control
HLTHSS009	Perform general cleaning tasks in a clinical setting
HLTWHS005	Conduct manual tasks safely
HLTHSS011	Maintain stock inventory
BSBOPS203	Deliver a service to customers
CHCCCS010	Maintain a high standard of Service
CHCPRP005	Engage with health professionals and the health system

YEAR 12

List of Competencies for Certificate III in Health Services Assistance (HLT33115)



Entry requirements

There are no entry requirements to commence the first year of this qualification; however successful completion of the Certificate II in Health Support Services is required to continue into the Certificate III coursework.

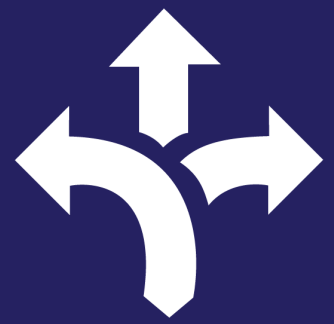
Course units Year 1 (Certificate II units)

UNIT CODE	TITLE
CHCCOM005	Communicate and work in health or community services (Credit Transfer)
HLTWHS001	Participate in workplace health and safety (Credit Transfer)
CHCDIV001	Work with diverse people (Credit Transfer)
HLTINF006	Apply basic principles and practices of infection prevention and control (Credit Transfer)
CHCCCS010	Maintain a high standard of Service (Credit Transfer)
CHPRP005	Engage with health professionals and the health system

Course units Year 2 (Certificate III units)

UNIT CODE	TITLE
HLTAAP001	Recognise healthy body systems
BSBMED301	Interpret and apply medical terminology
HLTAID009	Provide cardiopulmonary resuscitation
HLTAID010	Provide basic emergency life support
HLTAID011	Provide first aid
BSBPEF301	Organise personal work priorities
CHCCCS009	Facilitate responsible behaviour
CHCINM002	Meet Community information needs
HLTWHS002	Follow safe work practices for direct client care

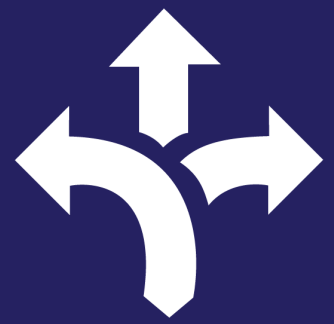
NOTES

[illegible]

ADDITIONAL INFORMATION



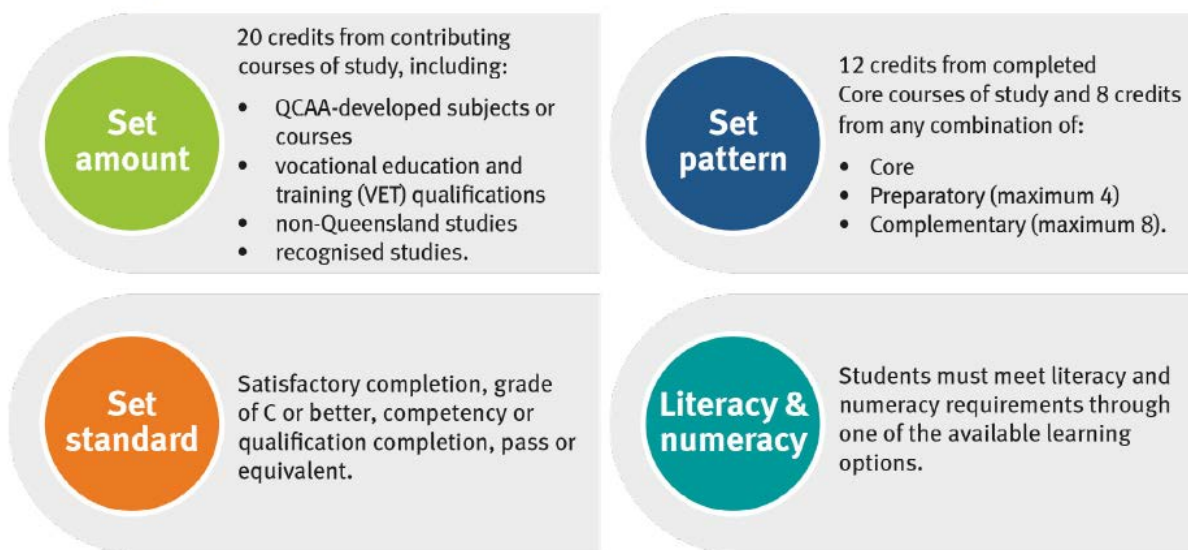
Queensland Certificate of Education (QCE)



The QCE is Queensland's senior secondary schooling qualification. It is internationally recognised and provides evidence of senior schooling achievements. To be issued with a QCE, students need to complete a set amount of learning, at the set standard, in a set pattern, while meeting literacy and numeracy requirements. The flexibility of the QCE means that students can choose from a wide range of learning options to suit their interests and career goals.

This student would achieve a QCE as he/she has achieved at least 20 QCE credits, at least 12 QCE credits from completed Core course of study and has met the minimum literacy and numeracy requirements.

QCE requirements



Set pattern

Within the set pattern requirement, there are three categories of learning — Core, Preparatory and Complementary. When the set standard is met, credit will accrue in a student's learning account.

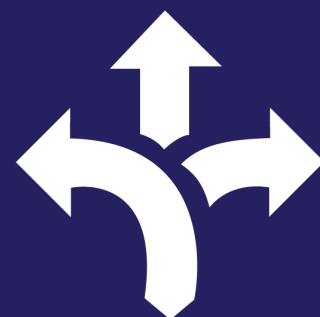
To meet the set pattern requirement for a QCE, at least 12 credits must be accrued from completed Core courses of study. The remaining 8 credits may accrue from a combination of Core, Preparatory or Complementary courses of study.

Core: At least 12 credits must come from completed Core courses of study	
COURSE	QCE CREDITS PER COURSE
QCAA General subjects and Applied subjects	up to 4
QCAA General Extension subjects	up to 2
QCAA General Senior External Examination subjects	4
Certificate II qualifications	up to 4
Certificate III and IV qualifications (includes traineeships)	up to 8
School-based apprenticeships	up to 6
Recognised studies categorised as Core	as recognised by QCAA

Preparatory: A maximum of 4 credits can come from Preparatory courses of study	
QCAA Short Courses	
• QCAA Short Course in Literacy	1
• QCAA Short Course in Numeracy	
Certificate I qualifications	up to 3
Recognised studies categorised as Preparatory	as recognised by QCAA

Complementary: A maximum of 8 credits can come from Complementary courses of study	
QCAA Short Courses	
• QCAA Short Course in Aboriginal & Torres Strait Islander Languages	1
• QCAA Short Course in Career Education	
University subjects (while a student is enrolled at a school)	up to 4
Diplomas and Advanced Diplomas (while a student is enrolled at a school)	up to 8
Recognised studies categorised as Complementary	as recognised by QCAA

Queensland Certificate of Education (QCE)



Literacy and Numeracy requirements:

The literacy and numeracy requirements can be met through a range of options, including satisfactory completion of Unit 1 or Unit 2 of an English subject (literacy) and a Maths subject (numeracy).

Completed Core requirements:

Completion of Unit 1 and Unit 2 are each recorded as 'satisfactory' or 'unsatisfactory'. Credit only accrues for each of Units 1 and 2 if there is 'satisfactory' completion.

Units 3 and 4 are graded together as a pair at the end of the course, using A-E grades.

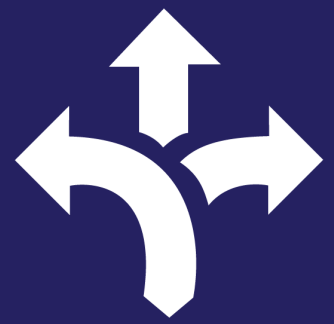
Students must accrue at least 12 credits from completed Core courses. Students must study a Core course from beginning to end to contribute to the 12 credits. For General or Applied subjects, this means studying all four units with an achievement of a C or better for the combined Unit 3 and 4 pair. For VET qualifications, this means completing a Certificate II or higher.

Relaxation of the completed core requirement will automatically apply for students who change from one Maths subject to another, or one English subject to another.

Consider the following scenario:

Subject/ Course	Results: Unit 1 and 2 - satisfactory/ <u>unsatisfactory</u> Units 3 & 4 A-E Ratings			QCE Credits	Contribute to Completed Core	Completed core credits
General/Applied Subjects						
	Unit 1	Unit 2	Unit 3 and 4			
English	S	S	B	4	Yes	4
General Maths	S	Changed TO Ess Maths		1	No – all 4 units have not been completed
Essential Maths		S	B	3	Yes – change switch in Maths and English subjects still count towards completed Core	3
Chemistry	S	S	D	2	No – C or better has not been achieved in Unit 3/4
Music	U	U	C	2	Yes	2
Modern History	S	S	Changed to Ag Science	2	No – all 4 units have not been completed
Ag Science			C	2	No – all 4 units have not been completed
Certificate Courses						
Cert II in Engineering	100 % complete			4	Yes – a completed Cert II qualification contributes to completed core	4
Total QCE Credits				23	Total QCE points from completed Core course of study	13

Australian Tertiary Admission Rank (ATAR)



This student would achieve a QCE as he/she has achieved at least 20 QCE credits, at least 12 QCE credits from completed Core course of study and has met the minimum literacy and numeracy requirements.

Australian Tertiary Admission Rank (ATAR)

The ATAR is used nationally for tertiary admissions, and indicates a student's position relative to other students.

The ATAR is expressed as a number between 99.95 (highest) down to 0 (lowest). ATARs below 30 are expressed as '30.00 or less'.

If the demand for a particular university course is greater than the number of places available, the university will use the ATAR to decide which eligible students are offered a place in the course.

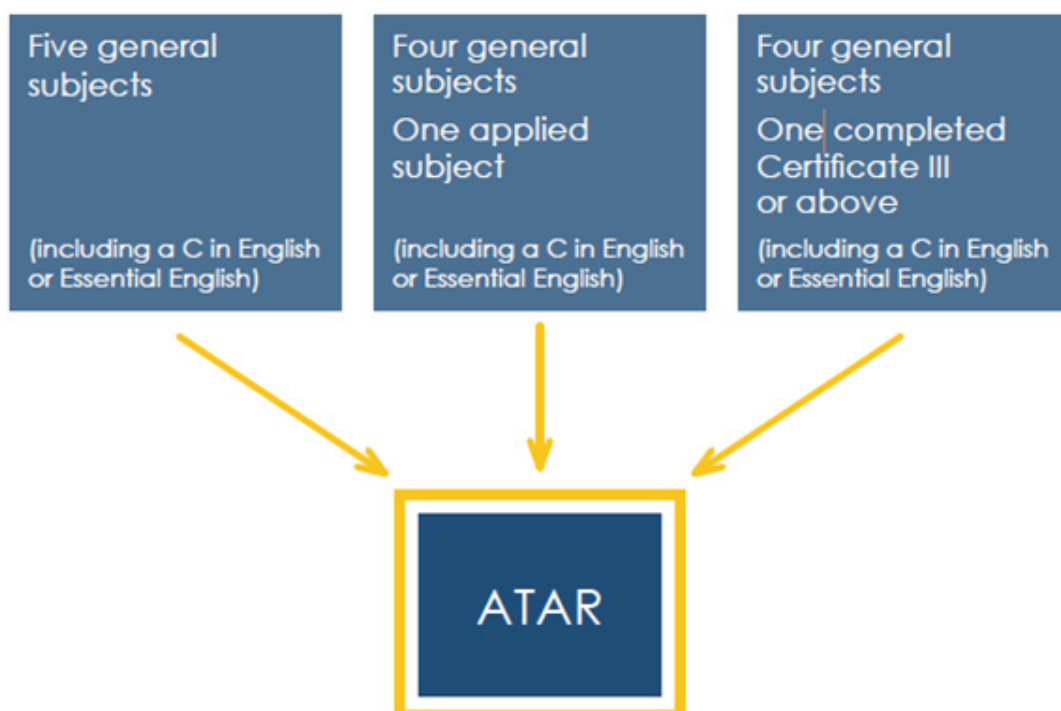
Students who are aiming to study at university after they finish school should work towards an ATAR.

Although some universities may allow entry into some courses on the basis of successful completion of a VET qualification, if students want to go to university it is important for them to check the entry requirements of all courses they are interested in before deciding not to pursue an ATAR.

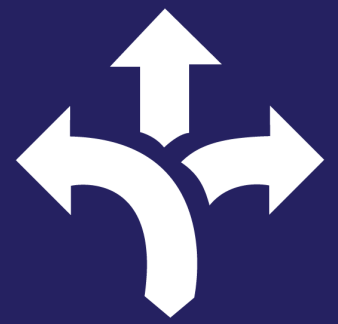
ATAR requirements

To be eligible for an ATAR, a student must have:

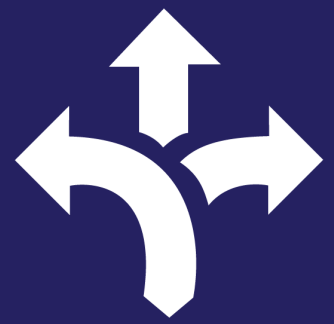
- achieved at least a C in an English subject (that is, English or Essential English)
- completed five general subjects; or four general subjects plus one applied subject; or four general subjects plus one VET Certificate III or above
- accumulated their subject results within a five year period.



NOTES

[illegible]

NOTES

[illegible]

A decorative vertical bar on the left side of the page. It features a purple-to-pink gradient background. Large, light-colored numbers '2', '0', '2', and '6' are stacked vertically. At the bottom, there are three curved arrows: a blue one pointing up, a red one pointing right, and a dark blue one pointing left, all within a circular arc.

2

0

2

6

MAKE YOUR DECISION

When selecting your subjects, ask yourself:

Do these reflect my strengths and goals?

For existing college students, subject selection for elective subjects is done through online web preferencing as part of the King's Park Expo. For new students, subject selection is completed as part of the enrolment process.



MACKAY CHRISTIAN COLLEGE

Kindergarten to Year 12

Primary School - Providence Campus

17 Ambrose Way, North Mackay Qld 4740

Secondary School - King's Park Campus

9 Quarry Street, North Mackay Qld 4740

Contact Us

- ☎ +617 4963 1100
- ✉ mcc@mccmky.qld.edu.au
- 🌐 mcc.qld.edu.au
- 📦 Po Box 3215, North Mackay Qld 4740

Mackay Christian Colleges Ltd
t/a Mackay Christian Colleges
ABN 22 070 555 389

2

0

2

6

