

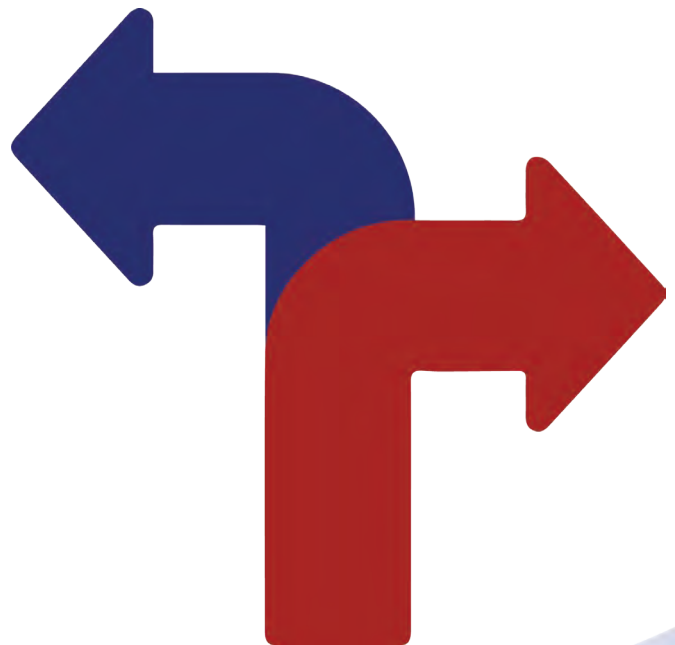


MACKAY CHRISTIAN COLLEGE

SENIOR SCHOOL

SUBJECT CHOICES

WE LOVE | WE CARE | WE LEARN



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A MESSAGE FROM THE COLLEGE PRINCIPAL

Welcome to Senior School at Mackay Christian College. The subject selection process is an opportunity for students to take control of what they learn in the school context as well as being an opportunity to prepare a future career path and to hone skills and talents for the future. At MCC we believe the best way to assist students and parents is to provide as much information as possible to allow students (and parents) to make wise, informed decisions.

The information provided in this book and the college's career guidance processes, along with the King's Park Expo are designed to help students and parents gather the information they need to make the best decisions about what subjects to study to achieve their desired pathway. No matter what subjects students choose and which pathway they pursue, Mackay Christian College is committed to help every student have the very best opportunity to 'become all God wants them to be'. We believe all children can learn.

The Queensland Certificate of Education (QCE) adds another dimension for the consideration of parents and students when making subject choices. The QCE provides a certified qualification intended to give potential employers a clearer indication of a student's capabilities. It is not only important to think about whether the prerequisites for university degrees have been covered, or whether you will even qualify for an ATAR score; you must also give thought to what will meet the requirements for a QCE. While every student who does any recognised Senior subjects will be issued with a Senior Statement, only students who satisfy the requirements for a QCE will receive a QCE Certificate.

In this booklet we have included all of the information you need to make the best decision for your future. However, if you are not sure of anything please ask the appropriate staff member. The choices you make are very important. This process determines which subjects will be offered and it is important to complete your online selection form on time. It is possible for students to make changes to their choices after the due date and at the start of the new school year, but this can only happen where the timetable and class numbers allow.

May God bless you as you prepare for the future.

Dr Barclie Gallogray
College Principal

Vision Statement

Mackay Christian College exists to foster and develop the God-given potential of each member of the college community, both students and staff, to permit them the possibility of fulfilling their personal Christian destiny.

Mission Statement

Mackay Christian College is a college community which consists of students, parents and staff working together to develop each child's potential in a wide range of learning situations. Emphasis is placed on positive, critical thinking skills and caring, respectful attitudes.

We believe that the education process is a continuous one from Early Learning to Year 12 and beyond and we are committed to the education of the whole person - personally, socially, cognitively, and spiritually. We believe that each member of the college community is entitled to a safe, secure, welcoming and loving environment to allow for the development of individual potential.

At Mackay Christian College we aim to provide a quality learning environment within which students will be encouraged to develop an ongoing personal revelation of Christ in their lives. We recognise the significance of the example and witness of staff, of a curriculum framework based on Biblical Christian thinking, and of the standing of our college within our community. High academic standards, good professional relationships, Godly discipline and high levels of home-school communication with families are all part of the college's mission.



A MESSAGE FROM THE HEAD OF SENIOR SCHOOL

Senior School at Mackay Christian College is about growing students 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 15 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 Senior School I am excited 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,

Peter Hopper
Head of Senior 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.

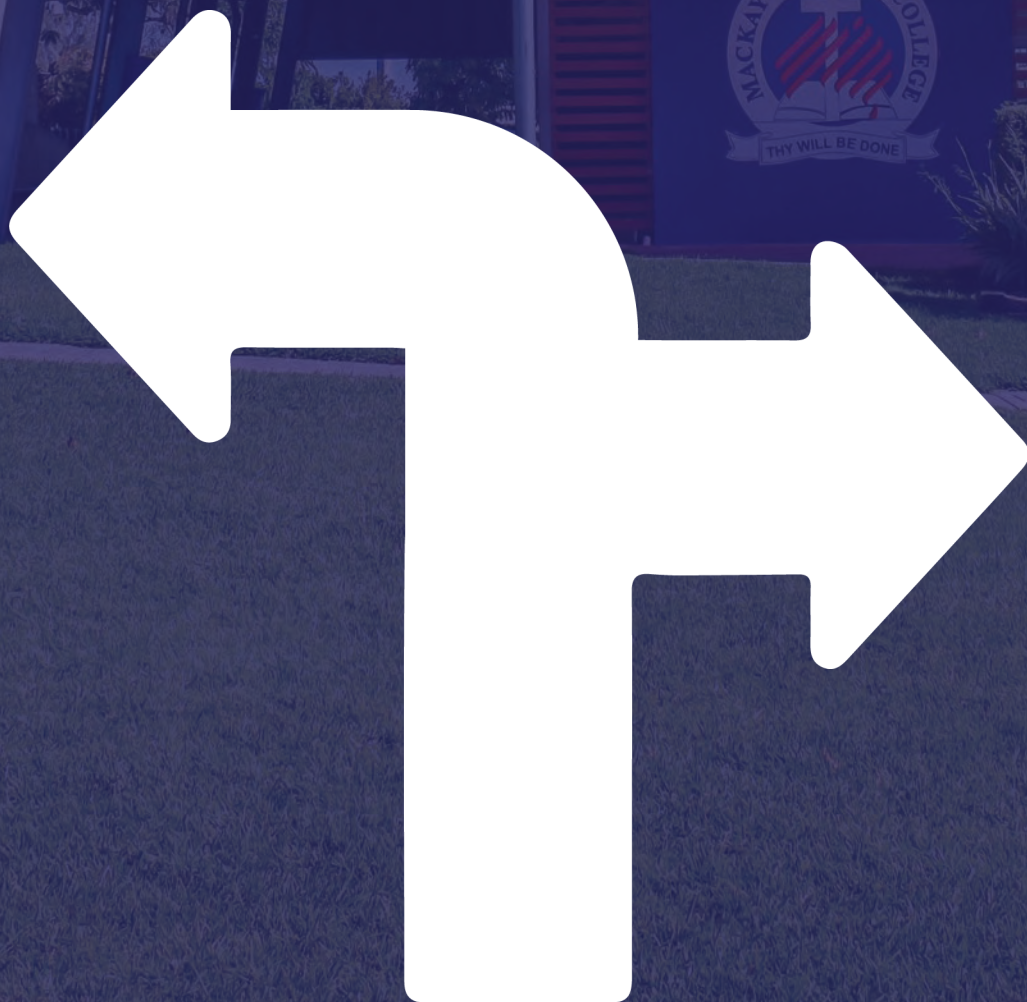
Continue at school until I get a job.

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 2024



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.

Students entering Senior School, 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. Due to the nature of the QCE Senior system of learning, it is very likely that subject changes throughout this learning phase will be very limited and therefore good choices at the start are essential.



YEAR 10 CORE SUBJECTS





OUR VALUES

SUBJECT: CLEAR

“Educating the mind without educating the heart is no education at all.”
- Aristotle -

In Year 10 CLEAR, students explore their own interests, gifting and talents with a focus on setting goals, investigating career opportunities and pathways, and serving others. Embedded in the CLEAR program is the QCAA (Queensland Curriculum and Assessment Authority) Career Options short course.

Students will earn 1 QCE (Queensland Certificate of Education) point upon achieving a C result or better upon completion of this course.

During CLEAR students 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 teachers careers counsellor about their post-school plans.

ENGLISH

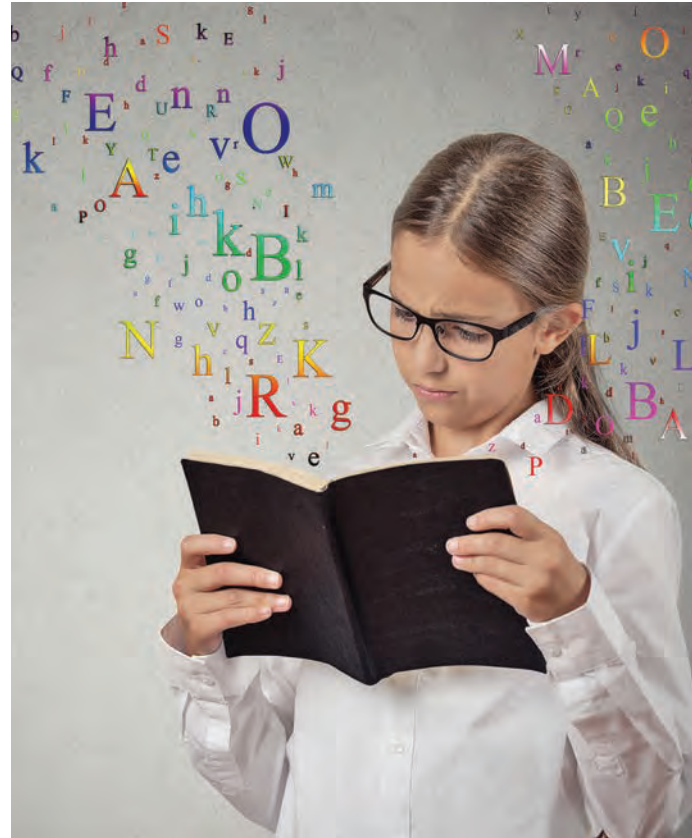
Year 10 English builds on the concepts, skills and processes developed in earlier years through increasingly complex and sophisticated texts. It lays the foundation for the compulsory study of English in Year 11 and 12, where students will be creating both analytical and creative texts that explore a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

Prep Mathematical Methods:

Extensions to Year 10 Mathematics is covered in this course which includes both Mathematical Methods content along with General Mathematical content covered in Senior years. Students wishing to undertake Specialist Maths in Year 11 and 12 will need to undertake Prep Mathematical Methods and achieve well in this course.

10 Mathematics:

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

Prep Essential Mathematics:

A more foundational approach to Year 10 Mathematics is covered in this course.

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

During the year, students choose to **take either:**

- Health and Physical Education
- Adventure Challenge

Year 10 Health and Physical Education provides students with the opportunity to explore topics and physical activities that promote health, participation and performance in physical activity. This subject is designed to prepare students for Senior Physical Education.

or

ADVENTURE CHALLENGE

Year 10 Adventure Challenge focuses on physical activities designed to challenge students physiologically, behaviourally and socially in diverse contexts and environments. It is expected that students will participate in movement challenges (as individuals and in teams or groups) and recreational activities, in natural and outdoor settings.

Access to specialised college facilities, equipment and relevant teacher expertise will engage students in activities such as mountain biking and gym.

Students will also become familiar with risk management and first aid.

HUMANITIES

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

Students will study History and two of the three subjects: Civics, Geography and Business. We will have 3 rotations throughout the year with each course being a third of the year 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 in the classroom and learn practical, transferable skills in the Agriculture Centre outside. This subject provides the opportunity for students to experience animal husbandry with horses, cattle and chickens.

Agriculture in Year 10 will prepare students for Senior Agricultural Science. 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, science, 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.





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.



MULTIMEDIA

Multimedia 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, Gaming and Interactive Media, 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

Visual Arts explores a range of 2D, 3D and digital media in the development of minor and major works. Students will gain knowledge and understanding by analysing, interpreting and responding to concepts in artworks. They also learn about and use knowledge, skills, techniques, processes, materials and technologies to explore art practices and make artworks that communicate ideas and intentions.

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

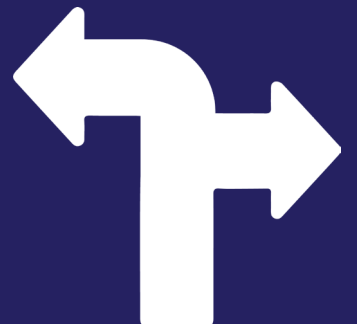
Personal & Social Skills

- 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



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.

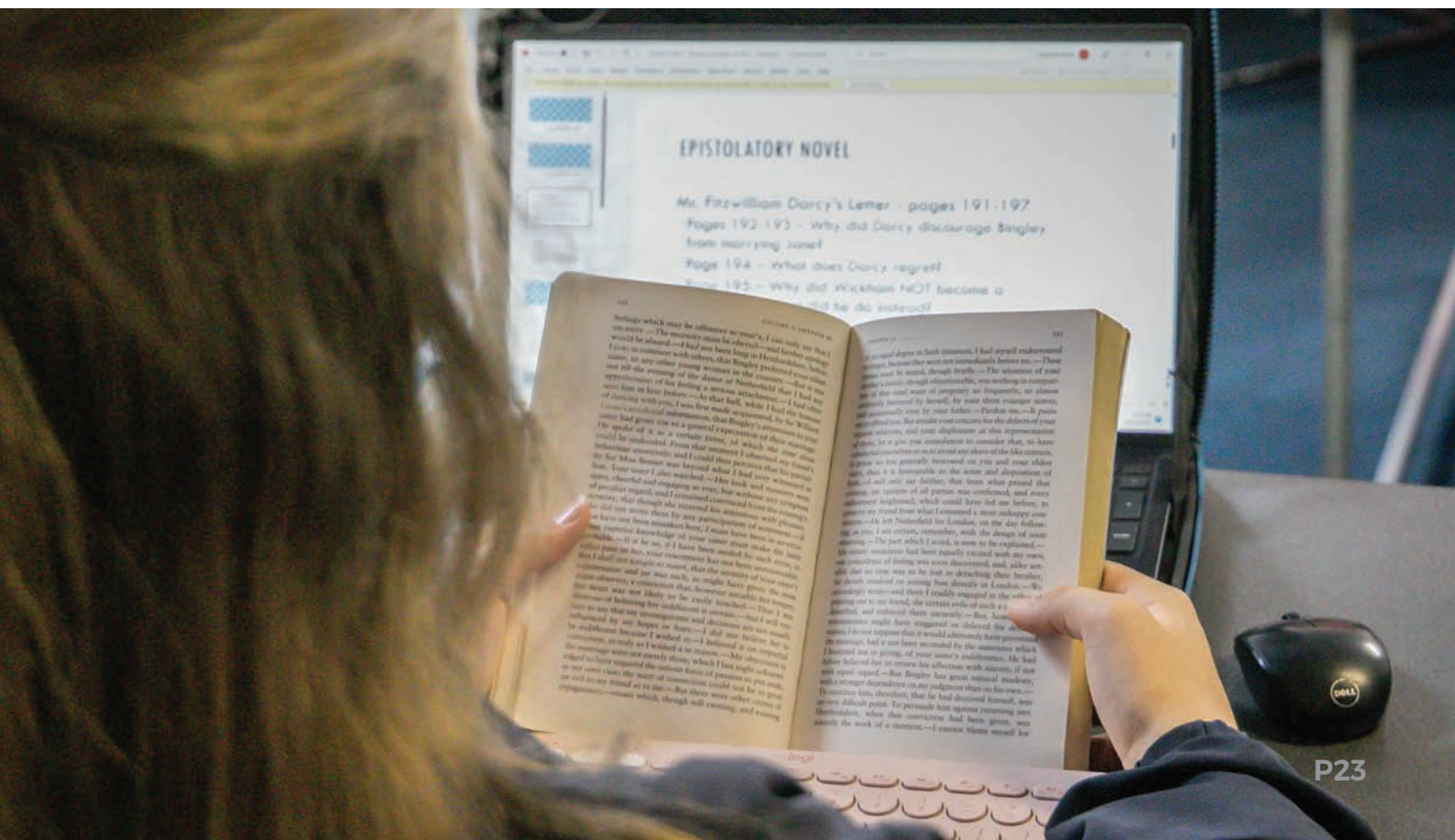
A course of study in English promotes open-mindedness, imagination, critical awareness and intellectual flexibility.

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

AGRICULTURAL SCIENCE



Australian and global agriculture is calling for more enthusiastic young scientists who are passionate about farming and the people who do it. Agricultural Science is a subject choice that enables students to be part of improving how we work in agriculture. It will suit students who are interested in doing a highly practical senior science subject as it provides a solid foundation of practical skills and knowledge that will support students in various career paths.

In Year 11 and 12, students explore:

- Crop and animal production
- Agri-business
- Innovation in agriculture
- The environmental sector
- Physical resource management.

Agricultural Science aims to develop students':

- Interest in Agricultural Science and their appreciation of how interdisciplinary knowledge can be used to understand contemporary issues in food and fibre production
- Understanding and appreciation of agriculture as a complex and innovative system, and how it relates to sustainable production decisions now and into the future

- Understanding that Agricultural Science knowledge is used in a variety of contexts and is influenced by social, economic, cultural and ethical considerations
- Ability to conduct a variety of field, research and laboratory investigations involving collection and analysis of qualitative and quantitative data, and interpretation of evidence
- Ability to critically evaluate Agricultural Science concepts, interpretations, claims and conclusions, with reference to evidence
- Ability to communicate understandings and justify findings and conclusions related to agricultural production systems, using appropriate representations, modes and genres.

Career Opportunities:

- Agronomist
- Environmental Scientist
- Veterinary Science
- Farm Manager
- Conservation
- Agribusiness Professional
- Horticulture
- Fisheries and Aquaculture
- Education



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

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

• 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.

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

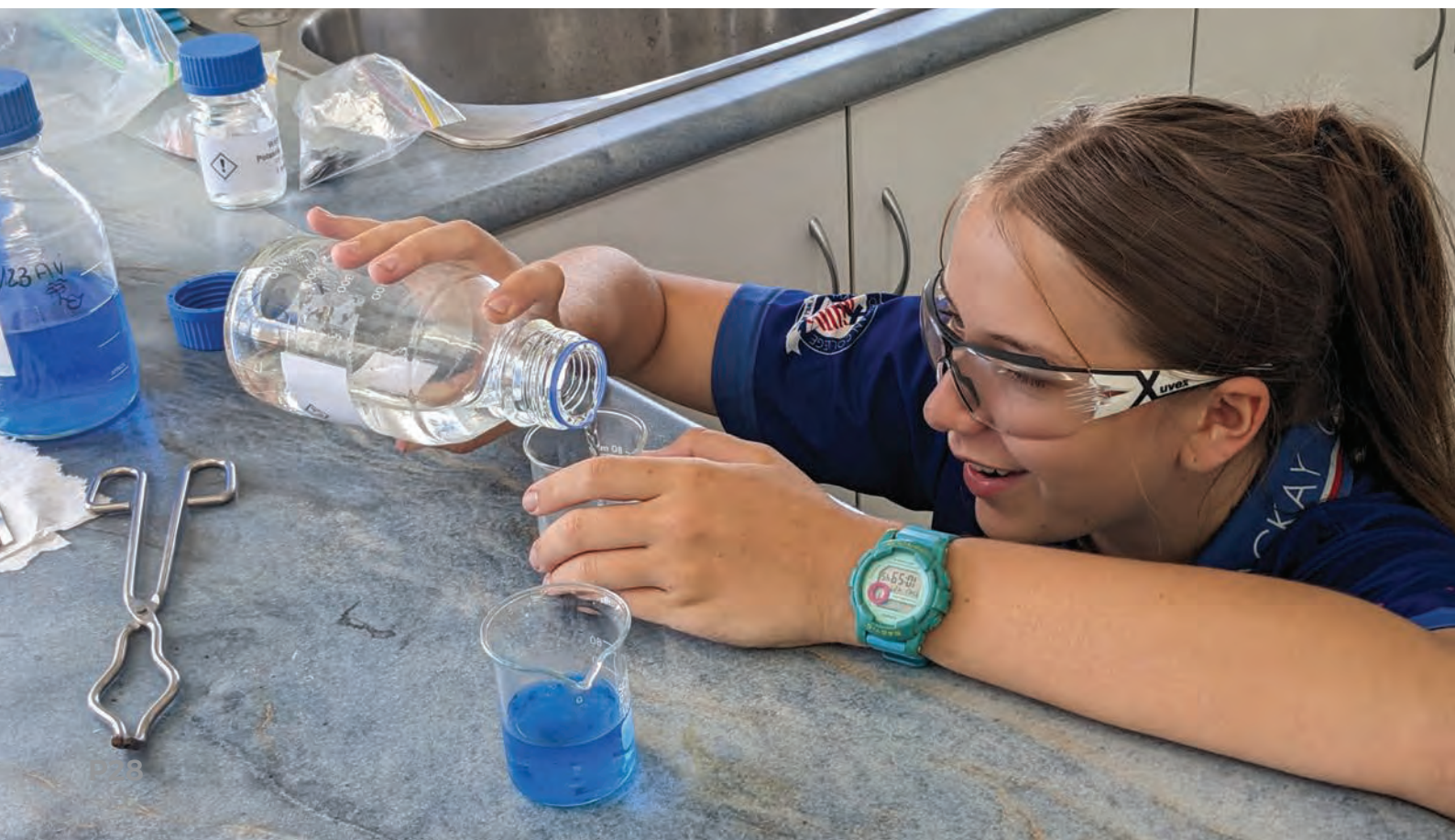
Studying Chemistry will develop students':

- 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



DESIGN



The Design subject focuses on the principles and application of design thinking to envisage creative products, services, and environments in response to human-centred wants and needs. Design thinking promotes a complex and sophisticated form of problem-solving that can present solutions regarding design styles, sustainability, and commercial endeavours. Designers research and identify constraints to inform their divergent and convergent thinking strategies which enables the appreciation and creation of new innovative ideas.

Students will develop valuable future focused skills in critical and creative thinking, communication, collaboration and information & communication technology (ICT) skills. Students will also develop illustration and prototyping skills to justify their chosen design solution, enhancing real world communication skills. Collaboration, teamwork and communication are crucial skills needed to work in design teams and liaise with stakeholders.

The design thinking knowledge students learn is broadly applicable to range of professions and equips students with highly transferrable, future-focused thinking skills relevant to a global context.

In studying Design, students will learn about:

- Design in practice
- Commercial design
- Human-centred design
- Sustainable design

Career Opportunities:

- Architecture
- Digital Media Design
- Fashion Design
- Graphic Design
- Industrial Design
- Interior Design
- Landscape Architecture



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)

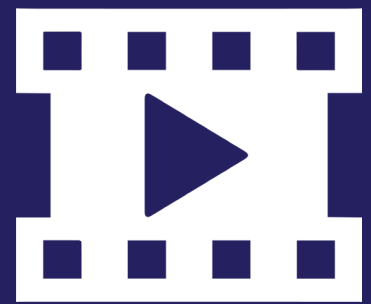
Drama engages students in creative processes and involves them using a range of artistic skills as they make and respond to dramatic works. They study a range of forms, styles and their conventions in a variety of inherited traditions, current practice and emerging trends. Students will have an opportunity 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)



LEGAL STUDIES



Legal Studies focuses on enhancing students understanding of the interaction between society and the discipline of law. Students study the legal system and how it regulates activities and aims to protect the rights of individuals, while balancing these with obligations and responsibilities. The primary skills of inquiry, critical thinking, problem-solving and reasoning empower Legal Studies students to make informed and ethical decisions and recommendations. These are critical skills that allow students to think strategically.

In Year 11 and 12, students study:

- Legal foundations, the criminal investigation process, criminal trial process and punishment and sentencing
- Civil law foundations, contractual obligations, negligence and duty of care
- Governance in Australia and law reform within a dynamic society
- Human rights, the effectiveness of international law, and human rights in an Australian context

An understanding of legal processes and concepts enables citizens to be better informed and able to constructively question and contribute to the improvement of laws and legal processes. This is important as the law is dynamic and evolving, based on values, customs and norms that are challenged by technology, society and global influences.

Career Opportunities:

Legal Studies is invaluable in helping students prepare for tertiary study and opens doors to employment in such diverse areas as:

- Law Firms
- Police Service
- Government Organisations
- Court System
- Journalism
- Social Planning
- Social Welfare
- Criminology
- Justice Studies
- Politics



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.

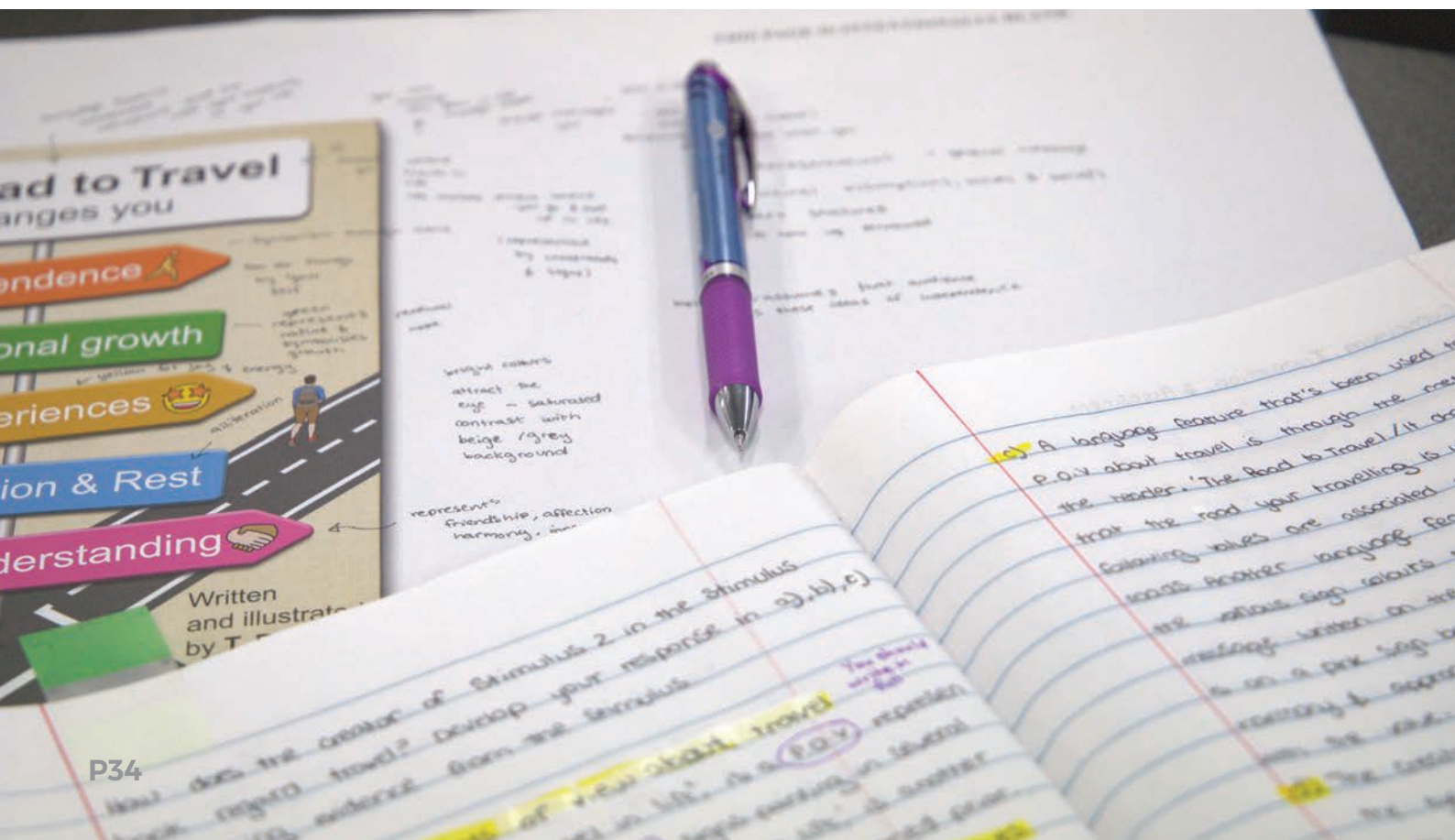
A course of study in Literature will assist students to develop a deeper appreciation for literature and help to refine their own writing and creativity.

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



The knowledge, understanding and skills taught through Physical Education enable students to explore and enhance their own and others' health and physical activity in diverse and changing contexts.

In Year 11 and 12, students study:

- Motor Learning, functional anatomy and biomechanics integrated with volleyball and track & field
- Sport psychology and equity
- Tactical awareness integrated with touch football and ethics & integrity
- Energy, fitness and training integrated with triathlon

Students in Physical Education learn through an inquiry approach that explicitly involves the integration of body and movement concepts with biophysical, sociocultural and psychological concepts and principles.

Career Opportunities:

- Exercise science
- Biomechanics
- Psychology
- Teaching
- Sport journalism
- Sport marketing and management
- Sport promotion
- Sport 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

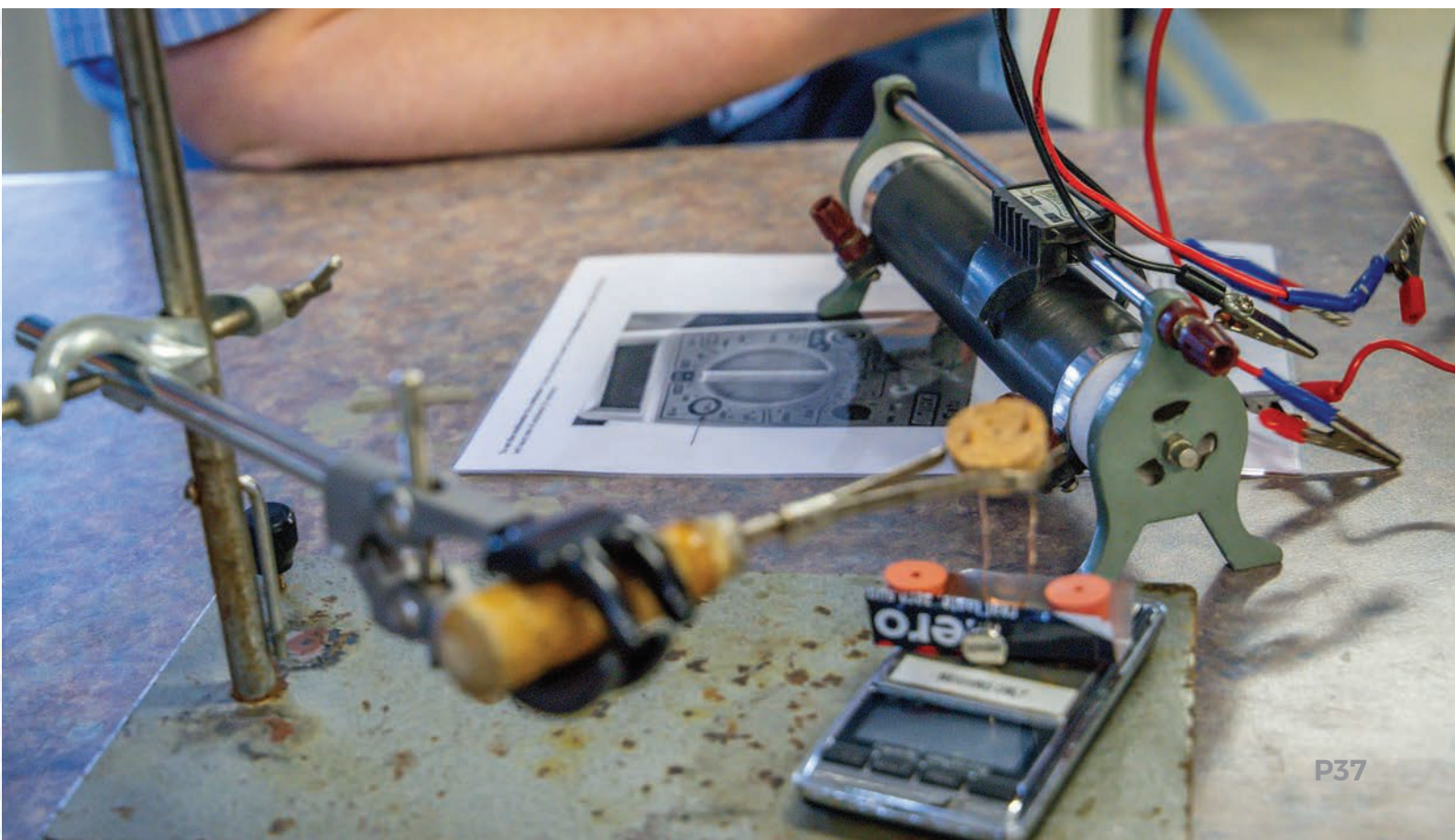
Physics aims to develop students':

- 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



SPECIALIST MATHEMATICS

$$E = MC^2$$

Students study this subject in conjunction with Mathematical Methods, ie to study Specialist Mathematics, Mathematical Methods must also be undertaken. A consistent and demanding workload is required, but there are substantial rewards for those students who are prepared to embrace this challenge.

Specialist Mathematics will allow students to further develop their Mathematical knowledge and skills, and this will also translate into the wider fields, for example Physics or Economics.

The Major domains covered in Specialist Mathematics are:

- Combinations and permutations
- Matrices
- Vectors
- Trigonometry and trigonometric functions
- Calculus
- Complex numbers
- Statistics

Combinations and permutations are essential tools when calculating variations or chance. Management of staff becomes easier when one can calculate easily how many different rosters can be created from a team of 15 people.

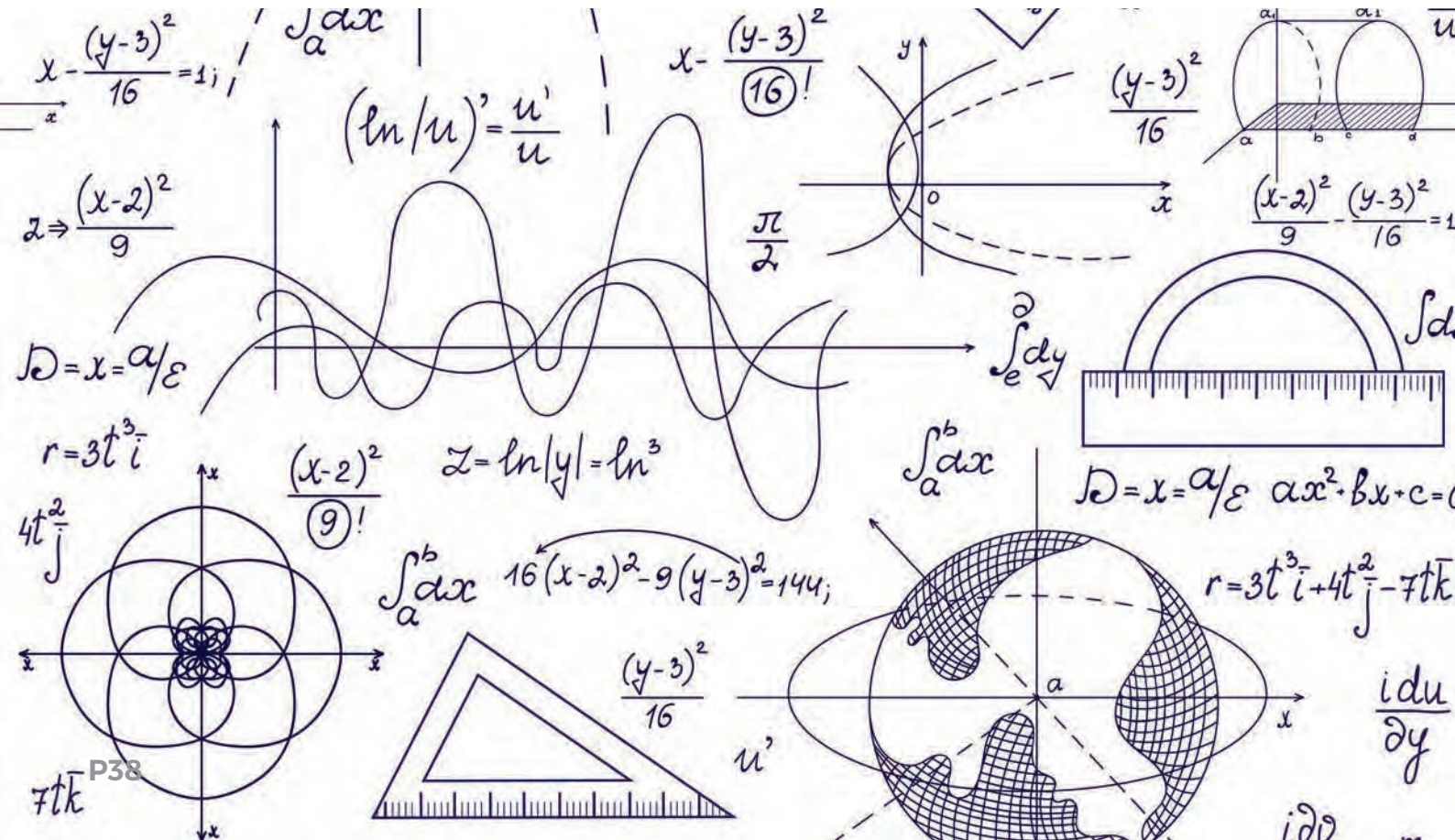
Calculus and trigonometric functions are paramount to calculating difficult engineering problems or calculating the trajectory of an object.

Complex numbers solve those problems that lie outside the realm of "Real numbers", while Statistics are vital for predicting where new hospitals, schools, and roads should be built.

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.

Career Opportunities:

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



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.

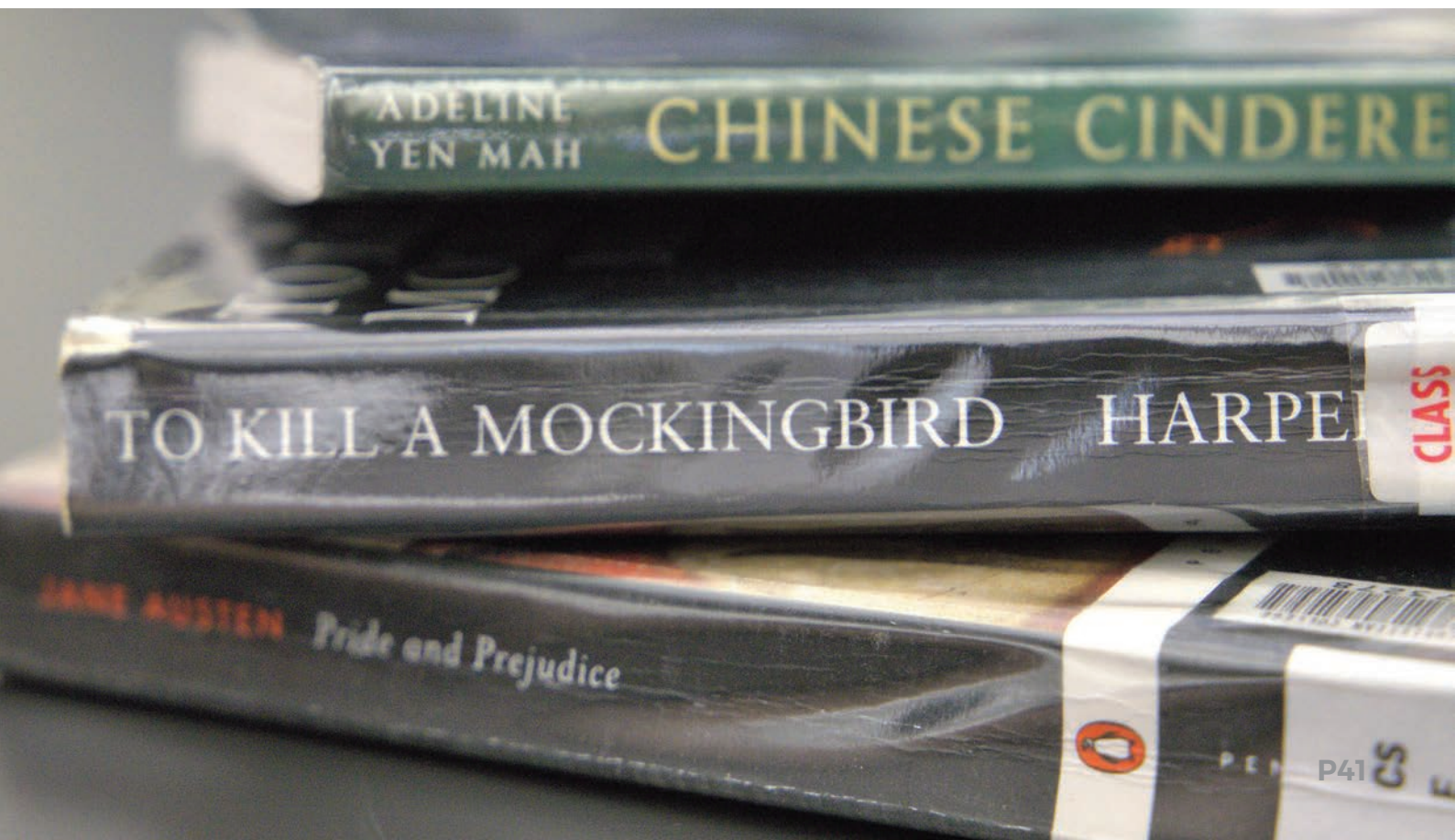
Students have opportunities to engage with language and texts through a range of teaching and learning experiences to foster:

- 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

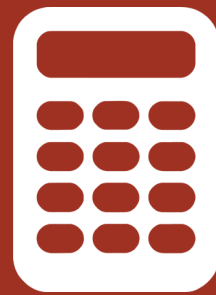
- Creative and imaginative thinking to explore their own world and the worlds of others
- Active and critical interaction with a range of texts, and an awareness of how the language they engage with positions them and others
- Empathy for others and appreciation of different perspectives through a study 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

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



The subject 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 consists of core components Business practices and Business functions, delivered through elective Business contexts. Students will explore functions and develop practices required to produce solutions to real life or simulated problems.

Students will analyse business information and will have opportunities to propose and implement outcomes and solutions in business contexts.

Students develop effective decision-making skills and learn how to plan, implement and evaluate business outcomes and solutions, resulting in improved economic, consumer and financial literacy.

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.

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



Hospitality Practices emphasises the food and beverage sector, which includes food and beverage production and service. Through this focus, students develop an understanding of hospitality and the structure, scope and operation of related activities in the food and beverage sector.

In Year 11 & 12, students:

- Explore the sectors of the hospitality industry, and personal attributes and presentation essential to working in this industry, working safely and effectively with others to produce, present and serve food and beverages to customers. They will work in teams to develop knowledge of in-house dining, diners and providing meals such as on a plane and skills to run in-house dining events.
- Focus on the development of knowledge, understanding and skills in kitchen production, presentation and service for casual dining. Students will implement an on-trend, casual dining event, demonstrating safe work practices, food production and service skills. During the event, students will make decisions to plan, implement and critique the event.

- Develop knowledge, understanding and skills in communication, including interpersonal communication, respect, sensitivity and crosscultural understanding, required when working with customers and colleagues in the hospitality industry. They also gain knowledge of legislation and quality assurance procedures that affect food and beverage service and promotion and marketing.

A course of study in Hospitality Practices can establish a basis for further education and employment in the hospitality sectors of food and beverage, catering, accommodation and entertainment industries.

Career Opportunities:

- Event Management
- Tourism
- Food Safety
- Food & Beverage Service
- Chef
- Kitchen Attendant
- Sommelier
- Maître d'



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.

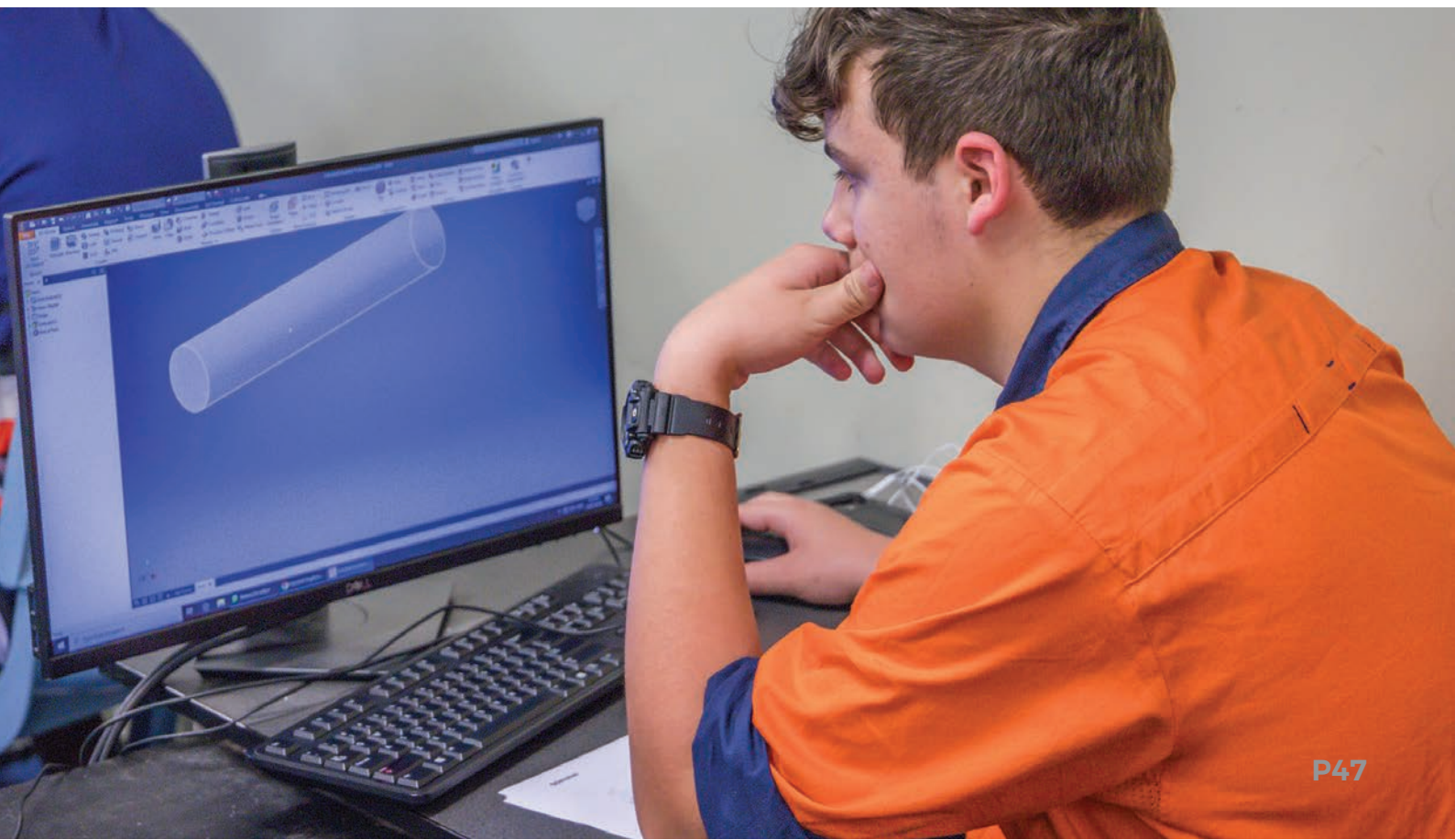
Students will develop the ability to establish and share ideas with others. They will expand the knowledge and skill required to produce drawings and information with enough detail to allow the manufacture of the product they have drafted.

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 focuses on the role of sport and recreational activities in the lives of individuals and communities.

Through the duration of the course, students have the ability to learn theoretical and practical aspects in the context of social and competitive sport, fitness programs and outdoor pursuits.

Students will develop skills regarding maintaining good health, evaluating strategies to promote health and safety, and investigating personal and interpersonal skills to achieve goals through sport and recreational activities.

Working individually in groups and teams, students appreciate the value of active involvement in sporting and recreational activities, contributing to ongoing personal and community engagement continuing into their adult life. Students through the duration of the course have the ability to obtain both their First Aid Certificate and Boat Licence.

Activities include:

- Gym
- Overnight Hiking Expedition (Year 11, including First Aid Certificate)
- Water Safety
- Overnight Kayaking Expedition (Year 12, including optional Boat Licence)
- Event Management & Promotion
- Coaching and Administration

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

Career Opportunities:

- Fitness
- Outdoor recreation and education
- Sports administration
- Community health and recreation
- Sport performance



VISUAL ARTS IN PRACTICE



Visual Arts in Practice is visual art that is created for a purpose. Through this broad-based, interdisciplinary course of study, students explore the core of arts literacies and arts processes, apply techniques and processes, analyse and create artworks, and investigate artists' purposes and audience interpretations.

In Year 11 and 12, students learn:

- 2D studies; exploring photography, mixed media and printmaking
- 3D studies; exploring ceramics, renewable textiles
- 2D and Digital 4D studies; student choice folio responding to themes and contexts
- Design; responding to a client brief, exploring conceptual development of an idea

The course is designed to help students:

- Engage in art-making processes for a purpose
- Examine how visual arts may be a vocation
- Investigate and apply display and curatorial skills
- Investigate information about artists, art movements and theories
- Integrate skills to create artworks and evaluate aesthetic choices

Career Opportunities:

- Design
- Styling & Decorating
- Illustrating
- Drafting
- Visual Merchandising
- Make up artistry
- Advertising
- Game design
- Photography
- Animation
- Ceramics



VOCATIONAL LEARNING CERTIFICATES





Year 11 Students:

These Certificates are run in partnership with Connect 'n' Grow (RTO Code: 40518) providing students with the basic skills for a career in the health and social services industries, as well as providing a pathway for those wishing to pursue further study in these fields.

The Certificates are delivered at the college with an opportunity to engage in 20 hours of work placement at The Mater Hospital. The training is theoretical and practical, including interactive virtual reality simulated work scenarios.

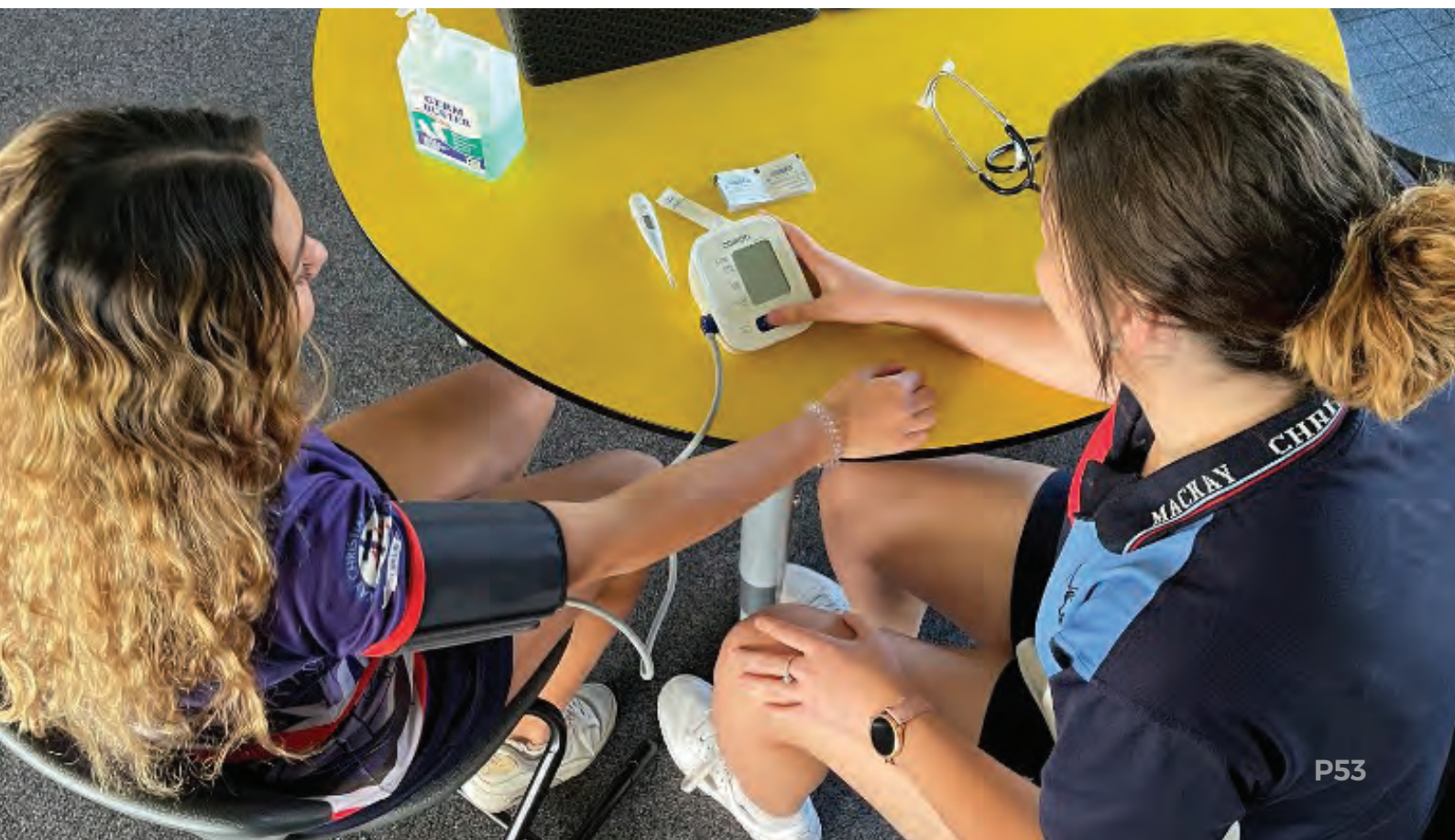
Year 12 Students:

Upon successful completion of the Certificate II in Health Support Services students can continue to study the HLT33115 Certificate III in Health Services Assistance in Year 12. Students will receive recognition for units of competency already completed as part of the Certificate II studied in Year 11 that form part of the Certificate III.

Refer to Appendix for course module details

Career Opportunities:

- Employment in Health Support Services, providing support for the effective functioning of health services.
- Employment in Community services by providing support for the first point of contact and assisting individuals in meeting their immediate needs.



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 the carer and Director of the Trade Training Centre.

This is to ensure that the participant and their parent/s or 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/s or 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:

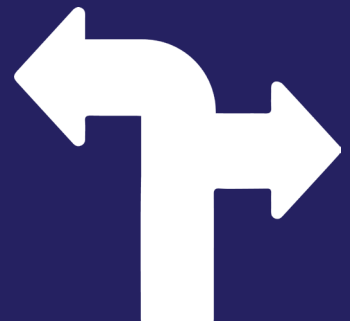
- Boilermaker
- Fitter and Turner
- Technicians and Trades Workers
- Metal Fabricator
- Machinist
- Heavy Vehicle Mechanic
- Light Vehicle Mechanic



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



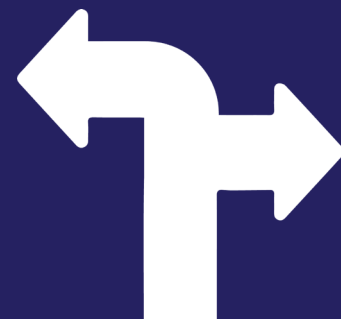
List of Competencies for Mem20413 Certificate II in Engineering Pathways



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

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 amount

20 credits from contributing courses of study, including:

- QCAA-developed subjects or courses
- vocational education and training (VET) qualifications
- non-Queensland studies
- recognised studies.

Set pattern

12 credits from completed Core courses of study and 8 credits from any combination of:

- Core
- Preparatory (maximum 4)
- Complementary (maximum 8).

Set standard

Satisfactory completion, grade of C or better, competency or qualification completion, pass or equivalent.

Literacy & numeracy

Students must meet literacy and numeracy requirements through one of the available learning options.

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

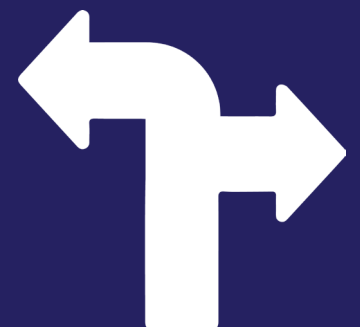
- **Preparatory:** A maximum of 4 credits can come from Preparatory courses of study

QCAA Short Courses <ul style="list-style-type: none"> QCAA Short Course in Literacy QCAA Short Course in Numeracy 	1
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 <ul style="list-style-type: none"> QCAA Short Course in Aboriginal & Torres Strait Islander Languages QCAA Short Course in Career Education 	1
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.

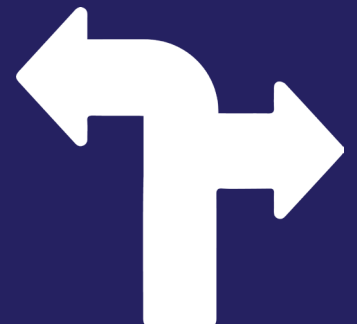
Students must accrue at least 12 credits from completed Core courses. Students must study a Core course from beginning to end to contribute to the 12 credits. For General or Applied subjects, this means studying all four units with an achievement of a C or better for the combined Unit 3 and 4 pair. For 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/unsatisfactory; Units 3 & 4 A-E Ratings			QCE Credits	Contribute to completed core?	Completed core credits
General and 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 – changes within 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 courses 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.

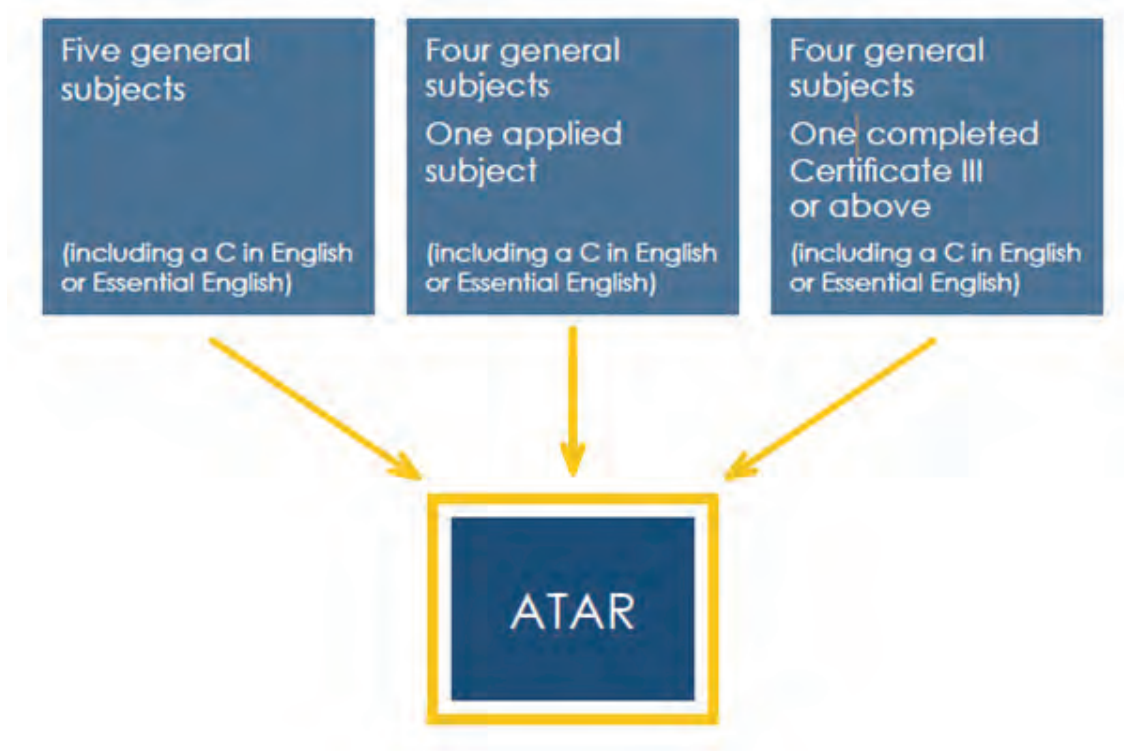
Students who are aiming to study at university after they finish school should work towards an ATAR.

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.



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

Junior School - Providence Campus

17 Ambrose Way, North Mackay Qld 4740

Middle & Senior 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