MELBA COPLAND

SECONDARY SCHOOL

COURSE GUIDE

PRINCIPAL'S WELCOME

The Melba Copland Secondary School (MCSS) community consists of the Junior Campus, Year 7-9 and the Senior Campus, Year 10-12. We are a high performing; supportive and vibrant school and we acknowledge and celebrate the rich diversity of our community. We seek to know every young person and work in partnership with families to develop purposeful educational experiences, to nurture and challenge students to become resilient, respectful and committed young people who make a positive contribution to the school and their community.

The MCSS Senior Campus provides for students to complete the ACT Senior Secondary Certificate, Vocational Education and Training (VET) courses which deliver nationally recognised certificates and qualifications. The academic rigour of our curriculum is demonstrated by the high standards achieved by our students.

MCSS offers opportunities for all students to challenge themselves across many areas, especially in the academic, sports and extracurricular areas. Many of the programs we offer include extension, enrichment and leadership opportunities such as the school musical, the arts showcase, STEM programs and sporting opportunities.

A rigorous academic curriculum is offered to meet the needs of students - with many courses available in a wide variety of areas and facilitated by expert teachers. We offer a widely utilised study program to support students.

Wellbeing at MCSS encompasses the students' cognitive, social, and emotional states of being, and supports them developmentally to discover who they are and who they aspire to become. To meet this end, student wellbeing is a whole-school approach, and we strive to provide an environment that promotes engagement, diversity, and inclusivity so that students, staff and families feel supported, valued and have purpose.

We are a dynamic, inspiring and nurturing learning community, dedicated to educating our students for an exciting future.

Kind Regards,

Jennifer Howard
Executive Principal

Contents

Campus Community

The College Campus encourages members of our community to participate in decisions that promote positive opportunities for students. We live in a rapidly changing world where students will need to make informed decisions and adapt as learners.

Central to making decisions is the intention to maintain a caring and supporting campus, guiding students through from adolescent years to adulthood. Parent and carer involvement during this period is essential. Opportunities are many and varied at the college and a student's goals may change multiple times. Engaging all stakeholders in these discussions and decisions is crucial.

MCSS Board

The MCSS Board is an elected body with the responsibility for school governance to support the school's educational policies and procedures. The Board oversees the annual budget of the school and ensures that the provision of facilities, equipment and resources are maintained at appropriate levels and standards.

MCSS Parents & Citizens Association

The P&C Association promotes the educational welfare and interests of the school by encouraging close co-operation among parents, pupils, school staff and community members. Through fundraising the P&C can contribute supplementary assistance for purchasing educational equipment and resources for student benefit.

Student Leadership

Leadership groups on each campus are energetic groups of students committed to addressing student issues of common concern, including fundraising for charities, organising school events, and advancing student leadership development. Our SRC students are also on the ACT SRC.

Financial Contributions and Library Trust Fund

All contributions to ACT Government schools are voluntary these contributions from families' parents form a hugely valuable part of our school budget each year. These funds support the full range of educational programs and activities and the purchase of educational materials.

Details of specific amounts are available at the time of student enrolment. Costs for camps, excursions and competitions are generally advised separately as the need arises.

Community Access to Facilities

Sporting and student development opportunities are fostered through community access to the dual-campus facilities. Sport, dance and other community organizations are regular users of our facilities.

Communication with the School Community

MCSS communicates with the wider school community in a variety of ways including:

- MCSS Fortnightly Wrap is published throughout the year and is available electronically via the website.
- Meet the Teachers Evening for Year 11 is held early in Term 1 for new parents.
- Reporting on student performance occurs at least four times a year. Mid-semester reports are distributed at the end of terms 1 and 3. Comprehensive semester reports are distributed at the end of each semester.
- Parent/Teacher Interviews are held each semester. In addition, parents and carers are encouraged to contact the college whenever they have a concern.
- College assemblies are conducted for celebrations and communication with students.
- Teachers will contact a parent/carer in cases where there is a significant issue of concern that cannot be communicated by scheduled reporting activities.
- The school Facebook page is updated regularly and contains details of events, success stories and important notices to the school community. Please like our page.

School Facilities

Some of our facilities include:

- Performing Arts Theatre with dance studio and music performance studios.
- Creative Arts Studio.
- Wireless networked campus and sophisticated computer network facilities across all curriculum areas.
- Specialised IT laboratories for Multimedia, Photography, Computer Aided Design, Robotics and CISCO Certification.
- Industrial technology facilities for engineering and construction industries.
- Science laboratories.
- Hospitality industrial kitchen and facilities, including a fully furnished café.

- Regional trade skills centre facilities for Horticulture, Construction and Hospitality.
- Indoor sports gymnasium with climbing wall, basketball, and futsal courts.
- Fitness lab equipped with weights and cardio equipment.
- Library information resource centre for seminars, individual and group study.
- Cafeteria, outdoor learning areas, study corners and relaxing grounds.

Student Wellbeing & Careers

The focus of Student Wellbeing at MCSS is to foster and support students to achieve their potential.

Student Wellbeing involves staff, students and the wider school community designing and implementing initiatives that focus on addressing the social and emotional wellbeing of each student. This personalised approach embeds qualities of productive and respectful relationships and a strong sense of community and individual responsibility.

Each year group has a Year Coordinator, who builds strong relationships with the students and provides a link between parents and staff and assists in the monitoring of behaviour and academic progress. There are two Student Wellbeing Executives on the college campus, dedicated to managing the Student Wellbeing Program.

A School Psychologist, Youth Worker and Lawyer are available to all students and their parents. Appointments can be scheduled, as needed, for case management and for making referrals on behalf of a student or their parent/carer to support agencies outside the school system.

MCSS has a team of Careers staff with the responsibility of guiding students through their career pathways. There is a strong focus on the transition of Year 10 into college and for Year 11 and 12 students to get up to date and relevant information on possible careers and further education opportunities.

The Careers staff also coordinate work experience, vocational courses and training, School Based Apprenticeships (ASBAs) and many other programs designed to offer students links between school, the workforce or further study or training.

Students are encouraged to contribute to the development of programs and services delivered by providing feedback or sharing their ideas with members of the Student Leadership Group. Students also can participate in a variety of forums and meetings designed to facilitate information sharing between staff and students.

Student Support at MCSS is a shared responsibility between students, teachers, parents, and carers. Students are expected to:

- Demonstrate respect and courtesy to all members of the school community.
- Have a positive commitment to their learning.
- Act in a manner that ensures their own physical safety and well-being, and the safety of other members of the school.

We encourage parents to maintain regular contact with the school so that the school can best meet the needs of their students.

Inclusive Education Programs

MCSS offers a comprehensive, integrated support program for students with additional needs to enable equitable access and participation in our school. Our various programs are designed to meet the individual needs of learners and works actively to eliminate barriers to inclusion.

Individual Learning Plans (ILP)

Students accessing a Disability Education program are required to have an Individual Learning Plan (ILP). The ILP identifies the personalised adjustments required for a student to access, participate, and achieve in learning. An ILP is developed by a collaborative team consisting of parents/carers, the student where possible, the school principal or delegate, the DECO (Disability Education Coordinator), teachers and other relevant professionals and agency representatives.

Supports

Below is a list of supports that students who meet eligibility criteria may be entitled to:

- In class support by Learning Support Assistant (LSA)
- Curriculum modifications
- Assessment modifications
- Referrals to outside agencies/supports
- Access to The Learning Hub (Years 11 and 12 only)

The Learning HUB

The Learning Hub provides a safe learning space for students that require extra support to complete work or understand assessment. All Year 11 and 12 students funded through the Disability Education Program (DEP) will be given the opportunity for a line in the Learning HUB.

The students can access the Learning HUB for many kinds of support, including:

- Study skills
- Organisation skills
- Clarifying work
- Finishing workbooks
- Support communicating with staff

ASBA students are placed in the Learning HUB to complete their training modules and seek help when required, in consultation with the Careers Team.

International Student Program

The International Fee-Paying Student (IPS) Program provides for overseas students through immersion to strengthen their English-speaking skills and attain academic and vocational excellence in an Australian school.

The IPS program involves a series of special events across the year. This involves excursions within and around Canberra to give students the opportunity to experience the Australian culture such as gold mining and bush activities. Students experience the hospitality student's expertise with a few special lunches. Students also are given the opportunity to develop links with ANU, CIT and UC to see where their future pathways lie.

Students will generally complete the ACT Senior Secondary Certificate and the IPS Coordinator ensures a very high level of academic supervision in addition to a strong student wellbeing provision for all international students.

Programs of Excellence

The College Campus provides a suite of opportunities for students to achieve excellence including:

- The Regional Arts Program (RAP) offers students both community and college-based opportunities to excel through our NSPIRE program, School Production and Arts Academy.
- The MCSS Outdoor Education Program provides challenging courses for students seeking their 'personal best', developing personal resilience and leadership strengths.
- University Extension Programs include the University of Canberra (UCAN) opportunities. UCAN also provides a bridging program.
- Provision of International Languages learning through the Canberra International Languages Centre

QUEST Dance

The aim of our QUEST dance program is to identify, nurture, and develop the advanced skills and creative potential of students who demonstrate exceptional ability in dance. Through specialised training, creative development, performances, competitions and post-18 training pathways, QUEST Dance aims to support and develop our students as dancers, work with their respective studios and prepare them for full-time dance programs.

Talented Athlete Academy (TAA)

The Talented Athlete Academy (TAA) is a sports excellence initiative aimed at talented sporting students at MCSS. The TAA program was established to support athletes while studying at MCSS and to provide specialised learning opportunities.

The sporting program is designed to enhance the sporting performance of students selected, by developing a holistic approach to their athletic development.

Note - TAA students must select Sports Development as one of their courses.

The MCSS TAA program can develop the whole athlete through a series of sessions that run throughout the academic year. Sessions will include:

- Professional fitness testing with UCRISE.
- Australian Institute of Sport recovery sessions.
- ADFA over water obstacle course.
- Professional Coaching observation seminars.
- Strength and Conditioning coaching.
- Motivational speakers with family members.
- Attendance at major sporting events.

Vocational Education and Training (VET)

Vocational courses are designed to provide knowledge and skills relevant to a particular area of employment and to further education and training.

Vocational courses:

- Help students try different careers.
- Offer students the opportunity to undertake learning in the workplace.
- Help students gain entry to training organisations such as CIT.
- May help students gain a traineeship or apprenticeship.
- May help students gain employment.

Vocational Courses at MCSS Senior Campus

The college vocational courses are based upon National Training Packages endorsed by industry. Successful completion of all required competencies and vocational placements will provide a student with a Vocational Certificate recognised throughout Australia.

Vocational teachers maintain strong links with industry and ensure that students have opportunities to extend their learning through excursions and training with external providers and through vocational placements.

Offered at MCSS through "Belconnen Training"

(RTO National Code – 88005):

- Automotive Technology – leading to a Certificate II in Automotive Vocational Preparation
- Construction Pathways – leading to Certificate I in Construction Pathways
- Hospitality – leading to Certificate I, II in Hospitality
- Horticulture – leading to Certificate I, II, III in Horticulture
- Business Services – leading to Certificate I, II in Workplace Skills, Certificate III in Business

Students may achieve a Statement of Attainment for partial completion of a certificate.

External Courses Offered by other RTOs (may vary throughout the academic year)

- **Canberra Institute of Technology (CIT)** –Responsible Service of Alcohol, White Card, Asbestos and Silica Awareness
- **Royal Life Saving Society Australia** – Senior First Aid Certificate
- **Academy of Interactive Entertainment** – Creative Industries (Game Dev.) Certificate II

Australian School-Based Apprenticeships

Australian School Based Apprenticeships (ASBA) allow students undertaking vocational courses to work part-time in the relevant industry, as well as completing their ACT Senior Secondary certificate. Students attend the workplace as a paid employee. This may occur one day per week, at weekends or in school holidays. An ASBA is an excellent way to develop industry experience and gain valuable contacts in the workplace. The careers advisor will help students organise an ASBA placement.

ACT Senior Secondary Certificate – Guidelines

MCSS awards the ACT Senior Secondary Certificate to all students who successfully complete Years 11 and 12. The ACT operates a system of school-based curriculum and assessment within the policy and procedures of the ACT Board of Senior Secondary Studies (BSSS).

School-based curriculum means that college teachers are involved in all curriculum development.

Assessment in the ACT is continuous school-based assessment. This means there are no external subject-based examinations. Courses are taught and assessed unit by unit. Moderation is conducted every semester to ensure comparability of grades from different schools, and the ACT Scaling Test (AST), a higher order thinking examination, is used to compare Tertiary scores from different schools for calculation of the ATAR.

The ACT BSSS requirements for an ACT Senior Secondary Certificate package are:

- A minimum of four different A, T, M, H, C or E courses from at least three different course areas. These must include at least two A, T or M courses and one of these must be in the English course area.
- Completing at least 17 standard units.
- Completing the package in no more than five years.

What are standard Units and Courses?

A standard unit has a value of 1.0 and is delivered for a minimum of 55 hours, generally over one semester. You may also be awarded 0.5 standard units which means that the unit was delivered for a minimum of 27.5 hours, generally over one term.

A course is a combination of units within a particular discipline.

Course Distribution Patterns

Courses have differing types indicating the duration of study in the course. The duration of study is indicated by the labels: **minor**, **major**, **major-minor**, and **double major**.

- **minors** require a minimum of 2 standard units.
- **majors** require a minimum of 3.5 standard units.
- **major-minors** require a minimum of 5.5 standard units.
- **double majors** require a minimum of 7.0 standard units.

What are A, T, M, V, E, H & R courses at MCSS?

- An **A** course is one which is accredited by the ACT BSSS as educationally sound and appropriate for students studying in Years 11 and 12.
- A **T** course is accredited by the ACT BSSS as providing appropriate preparation for higher education.
- An **M** course is accredited by the ACT BSSS as providing appropriate educational experiences for students who satisfy specific disability criteria.
- A **V** course is a vocational education and training program combined with an **A**, **T** or **M** course. A **V** course leads to a vocational Certificate or Statement of Attainment as defined by the Australian Qualifications Framework (AQF).
- An **H** course is designed and accredited by an Australian higher education provider and where successful completion of the course will be recognised towards an undergraduate degree with that provider.
- An **E** course is a VET course delivered by an external Registered Training Organisation (RTO), eg CIT.
- An **R** unit or course is designed to provide personal development, recreational or community service activities. (These units can count towards the accumulation of units towards the ACT Senior Secondary Certificate but do not count towards majors or minors.)

For more information about the BSSS and Year 11 and Year 12 requirements in ACT Public Colleges, please see the BSSS Website:

https://www.bsss.act.edu.au/home

Please refer to the BSSS Website link for more information on any of the courses that are listed from the next page:

https://www.bsss.act.edu.au/act_senior_secondary_system/curriculum/bsss_courses

MCSS College COURSE GUIDE (A – Z)

Ancient History (A/T/M)

The Ancient History curriculum enables students to study life in early civilisations based on the analysis and interpretation of physical and written remains. The ancient period, as defined in this curriculum, extends from the development of early human communities to the end of late antiquity AD 650, with a particular focus on the ancient societies of Europe, the Near East and Asia.

Units

- Investigating the Ancient World
- Ancient Societies
- People, Power and Authority
- Reconstruct the Ancient World
- Reconstruct Ancient Societies

Automotive Technology (A/M/V)

Automotive Technology A-M-V develops the knowledge, understanding and skills that underpin the automotive technology industry. Students investigate automotive components, systems, and technologies, and understand their interactions and relationships. They examine new and emerging technologies which impact the automotive industry, the careers available and the changing skill sets required for their implementation.

Units

- Automotive Principles
- Automotive Electrical Systems
- Vehicle Components and Systems
- Automotive Drive Systems
- Independent Study

This is a nationally recognised vocational course with competency standards approved by the Australian Skills Qualification Authority (ASQA). Students completing the course are eligible to receive:

- AUR20720 - Certificate II in Automotive Vocational Preparation

A Statement of Attainment will be awarded where at least one competency is achieved.

Biology (A/T)

Biology is the study of the fascinating diversity of life as it has evolved and as it interacts and functions. Investigation of biological systems and their interactions, from cellular processes to ecosystem dynamics, has led to biological knowledge and understanding that enable us to explore and explain everyday observations, find solutions to biological issues, and understand the processes of biological continuity and change over time.

This subject explores ways in which scientists work collaboratively and individually in a range of integrated fields to increase understanding of an ever-expanding body of biological knowledge. Students develop their investigative, analytical and communication skills through field, laboratory and research investigations of living systems.

Units

- Biodiversity and Connectedness
- Cells and Organisms
- Heredity and Continuity of Life
- The Internal Environment

Bridging Literacy (A/M)

Bridging Literacy is designed to support senior secondary students in achieving the benchmark of the Australian Core Skills Framework (ACSF) Level 3. This course is grounded in disciplinary literacy and authentic experience, aiming to empower students to engage with texts and tasks across diverse subjects and real-world contexts. Students develop fundamental skills in reading, writing, listening, and oral communication.

Units:

- Communicating with Purpose
- Reading and Researching
- Reporting Research
- Transferring Literacy to Life

Bridging Numeracy (A/M)

Bridging Numeracy is built on a foundation of students seeing and understanding how quantitative skills and understanding can be applied to their own lives, in the workplace, in their personal life, and as part of effective citizenship.

Units:

- Practical Numeracy
- Techo-mathematical Skills
- Making Informed Numeracy Decisions
- Interdisciplinary Mathematics

Business (A/T/M)

Students will study of the management of resources and the provision of goods and services, as well as the complexities of operating enterprises at the local, national, and global levels. They investigate ethical practices, including social responsibility and sustainability enabling them to engage with the world as responsible citizens and businesspeople. Students develop their knowledge and understanding of business structures. They develop an understanding of the principles and methods of marketing and advertising as central to business activity. Students develop the knowledge, understanding and skills to make business plans for specific contexts and markets. They develop an understanding of business leadership principles, and the ethical and regulatory contexts in which leadership occurs.

Units

- Business Opportunities
- Business Marketing
- Leading a Business
- Business Finance and Planning
- Independent Study

Business Services (A/M/V)

Business Services develops information management and office process skills. Based on nationally recognised competencies, which will help students to enter the workplace or to pursue further training.

Units- Each unit focuses on general computer use, communication skills and office procedures.

- Information Management
- Workplace Practices
- Relationship Development
- Project Management
- Independent Study

This is a nationally recognised Vocational course with competency standards approved by the Australian Skills Qualification Authority (ASQA). Students completing the course are eligible to receive:

- BSB10120 Certificate I in Workplace Skills
- BSB20120 Certificate II in Workplace Skills
- BSB30120 Certificate III in Business

A Statement of Attainment will be awarded where at least one competency is achieved.

Chemistry (T)

The study of materials, substances, and the transformations they undergo through interactions and the transfer of energy. Chemists use an understanding of chemical structures and processes to adapt, control and manipulate systems to meet particular economic, environmental and social needs. Including addressing global challenges, climate change, security of water, food and energy supplies, and designing processes to maximise the efficient use of resources. Chemistry develops students' understanding of key chemical concepts and models of structure, bonding, chemical change, and the role of chemical, electrical and thermal energy. Students learn how models of structure and bonding enable chemists to predict properties and reactions and to adapt these for particular purposes.

Units

- Chemical Fundamentals
- Molecules
- Equilibrium and Redox Reactions
- Structure, Synthesis and Design

Construction Pathways (A/M/V)

Construction Pathways focuses on the construction processes and industry practices required to create, maintain and repair the built environment in an increasingly technological and complex world. Students develop knowledge, understanding and skills associated with traditional and contemporary tools, and materials used by the Australian building and construction industry to create structures. They examine the challenges facing the

construction industry in adapting to new technology, building systems, products and practices, and explore future options.

Units

- Industry Practices
- Construction Processes
- Innovations in Construction
- Construction Project
- Independent Study

This is a nationally recognised Vocational course with competency standards approved by the Australian Skills Qualification Authority (ASQA). Students completing the course are eligible to receive:

- CPC10120 - Certificate I in Construction

A Statement of Attainment will be awarded where at least one competency is achieved.

Dance (A/T/M)

In *Dance*, students learn as artists, by making and interpreting dance performances that communicate to audiences. They learn as audiences, by responding critically to dance. Students develop skills in appreciating, creating, performing, and producing dance independently and collaboratively for a range of contexts. In *Dance*, movement is a knowledge. Students learn as they engage with the history, lineage, technical dance skills, theories and concepts of dance, choreographers and critics that came before them, and become literate in the vocabularies and ideas of a range of styles and forms.

Units

- Creativity in Dance
- Communicating Meaning in Dance
- Dance in Context
- Collaboration in Dance
- Independent Study

Data Science (A/T)

Data Science is the key to solving the problems of global issues such as climate change, consumerism, energy, health and poverty through data analysis, statistical inference, predictive modelling and related methods in order to understand and analyse phenomena. Students explore and develop solutions to interesting problems in a range of contexts, forming opinions and challenging attitudes using data as evidence to form compelling and persuasive arguments for change and innovation.

Units

- Data Representation and Analysis
- Big Data Analysis and Techniques

- Machine Learning
- Data Research Project
- Independent Study

Design and Emerging Technologies (A/T/M)

Design and Emerging Technologies offers students a range of career pathways in design in fields such as engineering, fashion, furniture, jewellery, textile and ceramics, at both professional and vocational levels. Students will also be able to understand how the selection and use of technologies contributes to a sustainable and improved future. Students studying technologies will learn about the design process and its application.

Units

- Design Processes
- Product Design
- Design for Manufacturing
- Innovation and Design
- Independent Study

Design and Graphics (A/T/M)

The study of Design and Graphics focusses on exploring the purposeful use of technologies and creative processes to produce design solutions. Students acquire knowledge and develop skills using technologies and other processes appropriately, to design and create graphic solutions.

Students engage with emerging technologies, make connections with industry, and apply industry standards and practices through the development of their projects.

Design and Graphics provides pathways in a range of related fields such as architecture, digital 3D modelling, industrial design, engineering, interior design, graphic design, furniture design, fashion, jewellery, ceramics, textiles, and trade-based careers.

Units

- Design Applications
- Design for a Client Brief
- Visual Communication
- Design for Screen & Media
- Independent Study

Design and Textiles (A/T/M)

The Design and Textiles course focuses on design thinking and the application of the design process to create and develop practical solutions using textiles as a medium. This will empower students to utilise design thinking in different contexts.

Students learn about the design and related industries by exploring; fundamentals of design, emerging technologies, textile futures, history and culture, sustainability and ethics.

Students apply innovation, creativity, problem solving, collaboration and project management skills in making appropriate design solutions.

Units

- Design Aesthetics
- Design for Purpose
- Design for Futures
- Design for Communication
- Independent Study

Designed Environments (A/T/M)

Designed Environments focuses on the fields of architecture, interior design, urban design, landscape and sustainable building design. This course gives students opportunities to explore the concept that good design has the power to transform and provide lasting solutions that improve our lives. It considers sustainability, aesthetics, human interaction, ergonomics, the ethical use of space and functionality. Students apply problem solving skills in making appropriate design solutions to create attractive and functional spaces such as playgrounds, buildings and galleries.

Units

- Architectural Design
- Landscape Architecture
- Interior Design
- Town Planning and Urban Design
- Independent Study

Digital Technologies (A/T/M)

Digital Technologies transform the way we communicate, learn, collaborate and work within our world. Students create new ways of doing things, generating their own ideas and creating digital solutions to problems of individual, community and global interest. They learn about computational thinking and the application of the design process to create and develop digital solutions using a variety of digital technologies.

Units

- Digital Assets
- Digital Applications
- Digital Solutions
- Structured Project
- Independent Study

Digital Products (A/M)

This course equips students with the essential knowledge and skills for success in an Information Technology workplace. Through hands-on experience with desktop applications, digital media, and data management, students develop practical abilities and a deep understanding of industry practices. The course also fosters critical thinking, problem-solving, decision-making, and both interpersonal and intrapersonal skills, preparing students for employment or further training.

Units

- Desktop Applications
- Digital Media Foundations
- Managing Data and Clients
- ICT Workplace Practices
- Independent Study

Drama (A/T/M)

The study of Drama develops knowledge and understanding through exploration of performance and production elements. Dramatic works have the capacity to engage, inspire and enrich all students, excite the imagination, and encourage students to reach their creative and expressive potential. Drama builds confidence, empathy, understanding about human experience, and a sense of identity and belonging. Students develop self-management, problem solving, leadership and interpersonal skills. They learn to be resourceful, critical, and creative thinkers, and develop capacity to take risks. Students experience the challenge and pleasure that comes from the study of drama that can be transferred to a range of careers and situations. There are opportunities to become involved in a major college production or our Regional Arts Program.

Units

- Creativity in Drama
- Communicating Meaning in Drama
- Drama in Context
- Adaptation in Drama
- Independent Study

Earth and Environmental Science (A/T)

Earth and Environmental Science is a multifaceted field of inquiry that focuses on interactions between the solid Earth, its water, its air and its living organisms, and on dynamic, interdependent relationships that have developed between these four components. Earth and environmental scientists consider how these interrelationships produce environmental change at a variety of timescales. To do this, they integrate knowledge, concepts, models and methods drawn from geology, biology, physics and chemistry in the study of Earth's ancient and modern environments. Earth and environmental scientists strive to understand past and

present processes so that reliable and scientifically defensible predictions can be made about the future.

Units

- Introduction to Earth Systems
- Earth Processes
- Living on Earth
- The Changing Earth

Economics (A/T/M)

In Economics, students study the allocation of limited resources to satisfy unlimited wants and needs. In doing so they address the economic problem of scarcity: what to produce, how much to produce and for whom to produce. They use a range of approaches and perspectives on economics to investigate these fundamental problems to form conclusions and make predictions. Students develop their knowledge and understanding of the history and development of economic theories and concepts, the application of theories in real world contexts, and the roles of stakeholders in addressing economic scarcity, inefficiencies, and inequalities. They develop an understanding of the significance of economics to interpreting their day to day lives and choices, and their subsequent impact.

Units

- Microeconomic Foundations
- Debates in Microeconomics
- Macroeconomic Foundations
- Debates in Macroeconomics
- Independent Study

Education Studies (T)

Education Studies provides students with an understanding of schools and education and of teaching and learning. Students will gain insights both into their own learning, and into the learning of others. They will also gain an understanding of the complex cluster of community relationships, contested ideas, and professional practices that manifest in schools.

Units

- Perspectives in Education
- Learning and Assessment Teaching and Engagement
- Curriculum in Action
- Independent Study

Engineering Studies (A/T)

Engineering Studies introduces students to engineering principles and systems and is based on finding solutions to real-world problems. In this interdisciplinary course, students apply engineering processes, understand underpinning scientific and mathematical principles,

develop engineering technology skills and explore the interrelationships between engineering and society. They rely strongly on their creativity, critical thinking and problem-solving skills.

Units

- Engineering Systems
- Engineering Processes & Concepts
- Applied Engineering
- Future Challenges & Innovations
- Independent Study

English (T)

English focuses on developing students' analytical, creative and critical thinking and communication skills in all language modes. It encourages students to engage with texts from their contemporary world, with texts from the past and with texts from Australian and other cultures. Such engagement helps students develop a sense of themselves, their world and their place in it.

It is possible to undertake a major or major/minor (5.5 units) or double major (7 or 8 units) course. This requires students to undertake two different units in various semesters.

Units

- Communication of Meaning
- Representations Through Texts
- Comparative Texts
- Perspectives

English as an Additional Language (EAL) (A/T)

English as an Additional Language (EAL) focuses on language learning and the explicit teaching of the structure, linguistic features and sociolinguistic and sociocultural aspects of Standard Australian English (SAE). Through close study of language and meaning, students of EAL explore how learning in and through English language and literature influences their own and others' personal, social and cultural identities and thought processes. They develop skills that enable them to use different registers of spoken and written SAE so they can communicate effectively in a range of contexts and for a variety of purposes in order to become effective cross-cultural users of language and dialect.

Units

- Language and Culture
- Perspectives in Texts
- Communication
- Issues and Attitudes
- Bridging 1: Communication Foundations
- Bridging 2: Consolidate Communication
- Bridging 3: Responding to Texts
- Bridging 4: Connecting to Texts

Essential English (A/M)

Essential English focuses on consolidating and refining the skills and knowledge needed by students to become competent, confident and engaged users of English in many contemporary contexts including every day, community, social, further education, training and workplace contexts. Essential English is designed to provide students with the skills that will empower them to succeed in a wide range of post-secondary pathways. The Australian Curriculum provides a sequence of four units to allow students to complete a major.

Units

- Comprehending and Responding
- Making Connections
- Understanding Perspectives
- Local and Global

Essential Mathematics (A/M)

Essential Mathematics focuses on enabling students to use mathematics effectively, efficiently and critically to make informed decisions in their daily lives. Essential Mathematics provides students with the mathematical knowledge, skills and understanding to solve problems in real contexts, in a range of workplace, personal, further learning and community settings. This subject offers students the opportunity to prepare for post-school options of employment and further training.

Units

- Unit 1 – Calculations, Percentages and Rates, Measurement, Algebra and Graphs
- Unit 2 – Representing and Comparing Data, Percentages, Rates and Ratios, Time and Motion
- Unit 3 – Measurement, Scales, Plans and Models, Graphs and Data Collection
- Unit 4 –Probability and Relative Frequencies, Earth Geometry and Time Zones, Loans and Compound Interest

Exercise Science (A/T/M)

Exercise science examines theories of the biological, physiological, biomechanical and psychological, the interrelationship and influences on performance and participation in physical activity. Students develop insights into the science underpinning sports performance and movement. When students undertake practical activities in Exercise Science, they gain knowledge through experiential learning.

This course prepares students for further study and provides pathways into careers such as physiotherapy, sport and injury prevention, fitness training and allied health.

Units

- Anatomy and Physiology of the Human Body

- Factors Affecting Performance
- Preparation for Training and Performance
- The Body in Motion

Food Studies (A/M)

Food is fundamental to our lives and impacts directly on the wellbeing of individuals, families and communities. In Food Studies, students experience the role of food across a range of contexts, cultures, and experiences. They learn to value the contributions of primary producers, manufacturers, retailers and cooks to the experience of a healthy and sustainable life. They explore and respond to the factors that determine food choices locally, nationally and globally.

The course also includes valuable aspects of budgeting and home planning and is designed to help students appreciate the responsibilities of living independently.

Units

- Food and Health
- Food Choices
- Food Communities
- Contemporary Food
- Independent Study

Furniture Making Pathways (A/M)

Furniture Making Pathways develops the knowledge, understanding and skills that underpin the furniture making and cabinet making industry. Students investigate the processes and practices that are required in the production of furniture and cabinets, utilizing existing and new technologies to best place them for future opportunities within the industry. Key concepts and ideas in the Furniture Making Pathways course include the purpose of furniture and cabinet making business, occupations, future directions, and trends. Industry practices and processes for a variety of purposes are explored and applied across a range of applications and simulations and as such allows for investigation in a diverse range of occupations.

Units

- Tools and Components
- Furniture Making
- Furniture Production
- Materials and Design
- Independent Study

Geography (A/T/M)

Studies in *Geography* draws on students' curiosity about the diversity of the world's places and their peoples, cultures and environments. It enables students to appreciate the complexity of our world and the diversity of its environments, economies and cultures.

Students can use this knowledge to promote a more sustainable way of life and awareness of social and spatial inequalities.

Units

- Natural and Ecological Hazards
- Sustainable Places
- Land Cover Transformations
- Global Transformations

Global Studies (A/T/M)

By undertaking Global Studies, students come to appreciate the nature of global politics. They examine what can be achieved, and why there is a plurality of views on decisions about progress and reform. Students explore how its key participants respond to global challenges and collectively create opportunities for the betterment of the world. A focus of analysis is the choice between pursuing self-interest and the collective good.

Units

- Global Actors
- Global Processes
- Global Challenges
- Global Opportunities
- Independent Study

Health Science (Human Biology) (A/T/M)

Health Science provides students with the opportunities to inquire into fundamental questions about cells and tissues, and organisms at the microscopic level, as well as the macro systems that regulate and control the body, using scientific methodologies, including empirical and literature-based approaches. They will develop a basic and broad knowledge of the human body and medical science that will support further studies at the tertiary level. The fundamental scientific and information literacy developed will also support making informed decisions as a person and a citizen navigating a complex and constantly changing context.

Units

- Human Reproduction and Development
- Cardiorespiratory Health
- Human Digestive and Renal Systems
- Concepts in Neuroscience

Health and Wellbeing (A/T/M)

Health and Wellbeing is the study of biological, physiological, psychological, social and cultural influences on health and broader wellbeing. They develop the ability to analyse influences and make decisions on health at an individual, community and global level. Students develop

their knowledge and understanding of theories, concepts and perspectives to explain health and lifestyle trends and patterns. They analyse the nature and purpose of health and broader wellbeing and develop insights into how values, behaviours, priorities and actions reflect the complex contexts in which people live.

Units

- Individual Human Health
- Health in Australia
- Health of Populations
- Global Health and Human Development

Horticulture (A/M/V)

Horticulture focuses on the processes and industry practices required to design, create, and maintain plant specific environments and business in an increasingly technological and information rich world. Students develop knowledge and understanding of scientific concepts in plant biology and physiology, soil nutrients and climate in conjunction with the skills to use traditional and contemporary tools, and materials of the horticulture industry for a range of purposes and in an array of contexts. They examine the challenges that exist in the horticulture industry in adapting to new technology, client demands, urbanisation and changing climatic conditions, and explore future options.

Units

- Nursery Systems
- Horticulture Maintenance and Management
- Sustainable Horticulture and Conservation
- Producing Food
- Independent Study

This is a nationally recognised vocational course with competency standards approved by the Australian Skills Qualification Authority (ASQA). Students completing the course are eligible to receive a:

- AHC10322 – Certificate I in Horticulture
- AHC20422 – Certificate II in Horticulture
- AHC30722 – Certificate III in Horticulture

Work placement is an essential component of achieving these certificates. A statement of attainment will be awarded where at least one competency is achieved.

Hospitality (A/M/V)

In Hospitality, students focus on the dynamic nature of the hospitality industry and develop an understanding of contemporary approaches and issues related to food and hospitality. Students investigate contemporary hospitality issues and current management practices and explore concepts such as the legal and environmental aspects, trends in hospitality and consumer protection. They procure, recycle and use resources in light of sustainability and environmental protection.

Units

- Hospitality Essentials
- Hospitality Operations
- Hospitality Industry
- Hospitality Management
- Independent Study

Through the theoretical and practical components of this course students are provided with opportunities to develop skills, concepts, processes and attitudes crucial to making valid decisions regarding hospitality issues.

These qualifications allow for further training at a higher level at CIT, other training providers or on the job training whilst working in the hospitality industry.

This is a nationally recognised vocational course with competency standards approved by the Australian Skills Qualification Authority (ASQA). Students completing the course are eligible to receive:

- SIT10222 – Certificate I in Hospitality
- SIT20322 – Certificate II in Hospitality

Work placement is an essential component of achieving these certificates. A Statement of Attainment will be awarded where at least one competency is achieved.

Indigenous Cultures and Languages (A/T/M)

In this course, students explore the complexities, diversity and unifying characteristics, as well as the rich opportunities of shared worlds and cultures. In studying Indigenous Culture and Languages, students will explore identity, social justice and human rights issues relevant in local, national and global contexts with reference to the world's oldest continuing culture, the Australian Aboriginal and Torres Strait Islander peoples. The course provides learning that allows students to examine and reflect on how Indigenous culture impacts on their own learning, and on the development of their knowledge and attitudes.

Units

- Communities, Cultures and Identities

- Representations and Perspectives
- Ways of Knowing
- Language and Wellbeing
- Independent Study

Interdisciplinary Science (A/T/M)

Interdisciplinary Science A/T/M engages students in investigating the complex relationships between systems and domains of science inherent to investigating phenomena and problems in the world today. They develop the scientific, mathematical, and technological skills to engage with the study of contemporary interdisciplinary science topics, such as aerospace and flight, and develop an understanding of problems confronting society.

Units

- Interdisciplinary Systems
- Modelling Systems
- Interdisciplinary Solutions
- Contemporary Innovations in Science
- Independent Study

Languages – Beginning, Continuing and Advanced Language (A/T)

Learning additional languages widens horizons, broadens cognitive and cultural experience, and develops communicative and intercultural capabilities. It also opens new perspectives for learners, not only in relation to other cultures and languages, but also in terms of their own language and cultural practices.

Language at MCSS can be studied at beginner, continuing or advanced level, students considering studying a language need to take into consideration the number of years the language has already been studied (if any), prior to selecting into a particular level of language at college.

MCSS should be able to offer students the opportunity to study the following languages:

Units

- Chinese T/A Beginning, Continuing and Advanced
- French T/A Beginning, Continuing and Advanced
- Japanese T/A Beginning, Continuing and Advanced
- Spanish T/A Beginning, Continuing and Advanced

Legal Studies (A/T/M)

Legal Studies explores the law, and its institutions and processes, in a social, economic and political context allowing students to investigate, question, and evaluate their personal view of the world and society's collective future.

Knowledge and understanding of law, legal systems, justice, and punishment empowers students to become engaged, active, and reflective citizens. In understanding a wide range of social phenomena, they develop intercultural understanding and cultural competence. The study of Legal Studies provides knowledge, skills and understanding to interpret the world, which can be utilised in a wide range of tertiary and industry pathways.

Units

- Crime and Justice
- Civil Law
- Contemporary Issues and the Law
- International Law
- Independent Study

Literature (T)

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, evaluate perspectives and evidence, and challenge ideas and interpretations. Literature explores how literary texts shape perceptions of the world and enable us to enter other worlds of the imagination. In this subject, students actively participate in the dialogue and detail of literary analysis and the creation of imaginative and analytical texts in a range of modes, mediums and forms.

Units

- Ways of Reading and Creating
- Intertextuality
- Power of Literature
- Literary Interpretations

It is possible to undertake a major or major/minor (5.5 units) or double major (7 or 8 units) course. This requires students to undertake two different units in various semesters.

Live Production and Services (A/M)

Live Production and Services focuses on the technical and design choices, processes and skills required to support live and blended performances in an increasingly technological industry. Students develop knowledge and understanding of sound, light, audio visual elements, stage management, design, and construction. They develop the technical skills and knowledge for the creative application of traditional and emerging technologies of the live production industry across a broad range of contexts such as live music, theatre, events, artistic installations, and exhibitions. They examine the challenges that exist in the live

production industry and explore potential solutions and opportunities, incorporating sustainable practices.

Units

- Live Production Industry
- Technical Production
- Event Operations
- Design for Production
- Independent Study

Mathematical Applications (T)

Mathematical Applications is designed for those students who want to extend their mathematical skills beyond Year 10 level but whose future studies or employment pathways do not require knowledge of calculus. The subject is designed for students who have a wide range of educational and employment aspirations, including continuing their studies at university or TAFE.

Units

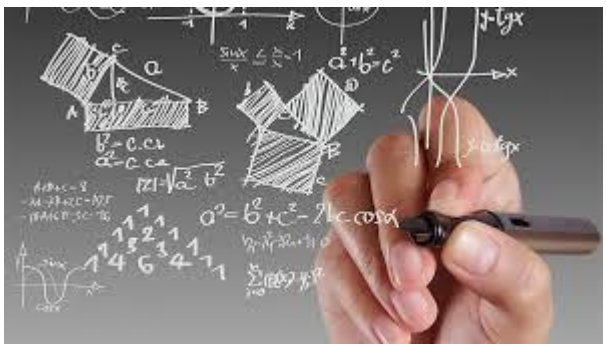
- Unit 1 – Consumer Arithmetic, Algebra and Matrices, and Shape and Measurement
- Unit 2 – Univariate Data Analysis and the Statistical Investigation Process, Linear Relationships, and Trigonometry
- Unit 3 – Bivariate Data Analysis, Growth and Decay in Sequences and Graphs and Networks
- Unit 4 – Time Series Analysis, Loans, Investments and Annuities and Networks and Decision Mathematics

Mathematical Methods students may change to Mathematical Applications at any time in Year 11 or at the beginning of Year 12.

Mathematical Applications students with outstanding results may move to Mathematical Methods without penalty after Term 1 or Semester 1.

Mathematical Methods (T)

The major themes of Mathematical Methods are calculus and statistics. They include as necessary prerequisites studies of algebra, functions and their graphs, and probability. They are developed systematically, with increasing levels of sophistication and complexity. Calculus is essential for developing an understanding of the physical world because many of the laws of science are relationships involving rates of change. Statistics is used to describe and analyse phenomena involving uncertainty and variation. For these reasons this subject provides a foundation for further studies in disciplines in which mathematics and statistics have important roles. It is also advantageous for further studies in the



health and social sciences. In summary, the subject Mathematical Methods is designed for students whose future pathways may involve mathematics and statistics and their applications in a range of disciplines at the tertiary level.

Units

- Unit 1 – Topic 1 – Functions and Graphs, Topic 2 – Trigonometric Functions – Topic 3 – Counting and Probability
- Unit 2 – Topic 1 – Exponential Functions, Topic 2 – Arithmetic and Geometric Sequences and Series, Topic 3 – Introduction to Differential Calculus
- Unit 3 – Topic 1 – Further Differentiation and Applications, Topic 2 – Integrals, Topic 3 – Discrete Random Variables
- Unit 4 – Topic 1 – The Logarithmic Function, Topic 2 – Continuous Random Variables and Normal Distribution, Topic 3 – Interval Estimates for Proportions
- Unit 5 – This unit combines Unit 3b and Unit 4a Should this say Unit 3 - Topic 2 and Unit 4 - Topic 1

Similar to Specialist Mathematics, students considering enrolling in Mathematical Methods should have achieved success in Year 10 Advanced Mathematics.

Media (A/T/M)

The study of Media develops knowledge and understanding of traditional and contemporary media practices through engagement with media works from a range of different styles, times, places, and cultures. Through exploration of codes and conventions, students understand that media stems from traditions, that media is dynamic and changes over time and that media works differ widely in different contexts. They learn as consumers and content creators, by responding critically to media products, concepts, and theories. Through theories of communication and evaluation of media products, students enrich their intercultural understanding.

Units

- Creativity in Media
- Communicating Meaning in Media
- Media in Context
- Narratives in Media
- Independent Study

Metal Products (A/M)

The study of Metal Products provides opportunities for students to engage with emerging technologies, make connections with industry, apply standards and practices through the manufacturing of their metal projects.

This course is intended to meet the needs of students who have a general interest in industrial technology trades as well as those intending to choose a career pathway into traditional metal trades and related service industries.

Units

- Working with Metal
- Techniques in Metal Manufacture
- Welding and Cutting Skills
- Metal Project
- Independent Study

Modern History (A/T/M)

The Modern History curriculum enables students to study the forces that have shaped today's world and provides them with a broader and deeper comprehension of the world in which they live. While the focus is on the 20th century, the curriculum refers back to formative changes from the late 18th century onwards and encourages students to make connections with the changing world of the 21st century.

Units

- Understanding the Modern World
- Change in the 20th Century
- Modern Nations
- The Modern World Since 1945
- Understanding Modern Nations - This unit combines Understanding the Modern World b and Modern Nations a
- Modern World - This unit combines Change in the 20th Century b and The Modern World since 1945 a

Music (A/T/M)

Music is unique as an aural art form that develops cognitive, kinaesthetic, empathetic, and aesthetic capacities in students. It is an integral part of culture, society, and personal identity. In Music, students learn about principles, practices and approaches to music making, and develop a critical understanding of self and perspectives on the world. The critical study of music engages in research, development of technical skills, communication and involves students in debate on contemporary issues. Through listening, performing, composing, presenting, and producing, students develop an informed appreciation of music. This course has been written with open expectations around prior technical skills. This is intended to increase access to students from a wide range of musical backgrounds, traditions, and experiences. Teachers will make judgements and form expectations in line with the achievement standards but apply them to a wide range of music making activities.

Units

- Creativity in Music
- Communicating Meaning in Music
- Music in Context
- Improvisation and Variation in Music
- Independent Study

Performance and theory are an assessable part of each course. Students can study Music at tertiary (T) or Accredited (A) levels. Tertiary study is suggested for students who have reached Grade 3 music studies outside of school.

Networking and Security (A/T)

Networking and Security focuses on network technologies and architecture, and the devices, media and services and operations in different types of networks. Students learn how networks facilitate device to device communication through an exploration of core networking technologies and their configuration. The security of data and the implications of networked systems for data privacy are considered from many perspectives, including the technical implementation of secure protocols and the ethical challenges associated with providing encrypted communications and storage for all users.

Units

- Networking and Cyber Security
- Network Administration and Security
- Designing and Securing Enterprise Networks
- Cloud and Distributed Systems
- Independent Study

Outdoor and Environmental Education (A/T/M)

Outdoor and Environmental Education provides students with skills and knowledge to understand the role of the environment in mental health and physical wellbeing. It provides skills allowing students to safely and respectfully participate in physical activity in diverse outdoor environments. It allows students to understand the concept of discriminating between risk and challenge and to develop social and leadership skills. Students develop insights into environmental sustainability, particularly in local contexts. This course prepares students for lifelong physical and recreational activity as well as employment pathways.

Units

- Discover Outdoor Environments
- Planning and Management
- Responsibility of Self and Others
- Sustainable Outdoor Recreation
- Independent Study

Outdoor Recreation (A/M)

Outdoor Recreation focuses on the significance and practices of the outdoor recreation industry. It explores the role of outdoor recreation in the life of individuals and communities. It provides students with the opportunities to learn in, through and about the technical, interpersonal, intrapersonal, and metacognitive skills required to participate in and lead simulated and actual activities. Outdoor Recreation provides avenues for mental and physical growth, relaxation, management of risk, and social connection through activities as varied as, but not limited to, bushwalking, abseiling, rock climbing, caving, canoeing, kayaking, snorkelling, and scuba diving.

Units

- Recreation Industry
- Outdoor Recreation Planning
- Adventure Learning
- Leadership in Outdoor Recreation
- Independent Study

Pathways to Work and Learning (A/M)

This course is designed for individuals who are seeking foundation skills development to prepare for workforce entry or vocational training pathways. It aims to provide a foundation for students to improve their literacy, numeracy and digital technology skills as well as develop life skills and career planning. This includes developing skills in, understanding self, identifying opportunities, demonstrating career enhancing decision making, goal setting and actioning plans.

Units

- The Career Mindset
- Workplace and Learning Practices
- Enterprise Skills
- Creating Opportunities
- Independent Study

Philosophy (A/T/M)

Philosophy empowers students to reflect on themselves and the world. They investigate the challenges faced by individuals and society and interrogate approaches used to address questions, and consider solutions to, those challenges. Students critically analyse and deploy philosophical ideas from a range of periods and cultures to understand enduring problems and critique accepted wisdoms and arguments about solutions.

They refine analytical and critical thinking skills and learn to question and challenge assumptions about the world around them.

Units

- Knowledge and Knowing
- Existence and Reality
- Judgement and Value
- Philosophy in the World
- Independent Study

Photography (A/T/M)

The study of photography can be used to broaden personal experience and understanding of an increasingly interconnected and technologically rich world. Photography enables students to explore and understand self, others, the world, and their place in it, as creators and consumers.

Units

- Creativity in Photography
- Communicating Meaning in Photography
- Photography in Context
- Narrative in Photography
- Independent Study

There are no prerequisite units in Photography. Students are able to enrol in Photography classes at any time. It is possible to undertake a major or major/minor or double major.

Physical Education (A/M)

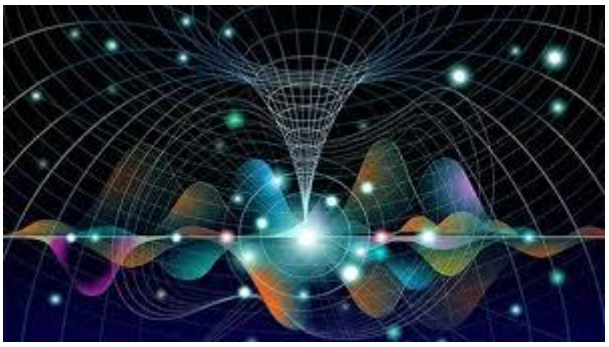
Physical Education Studies are the study of biological, physiological, psychological, social and cultural influences on performance and participation in physical activity. Students develop knowledge, understanding and skills, including physical literacy competencies, to support them to be resilient, to strengthen their sense of self, to build and maintain relationships, and to make decisions to enhance their health and physical participation.

Units

- Sports Skill Acquisition
- Leisure and Recreation
- Building and Improving Teams
- Sport, Activity, Culture and Society

Physics (T)

Physics is a fundamental science that endeavours to explain all the natural phenomena that occur in the universe. Its power lies in the use of a comparatively small number of assumptions, models, laws and theories to explain a wide range of phenomena, from the incredibly small to the incredibly large. Physics has helped to unlock the mysteries of the universe and provides the foundation of understanding upon which modern technologies and all other sciences are based.



Units

- Linear Motion and Waves
- Thermal, Nuclear and Electrical
- Gravity and Electromagnetism
- Revolutions in Modern Physics

Pre-Modern History (A/T/M)

The Pre-Modern History curriculum enables students to study life in the pre-modern period based on the analysis and interpretation of physical and written remains. The pre-modern period is global in scope and covers the period c. 400-1750 CE. The study of pre-modern history illustrates the development of some of the distinctive features of contemporary societies. Pre-modern history is also concerned with the possible motivations, and actions of individuals and groups, and how they shaped the political, social and cultural landscapes of the pre-modern world.

Units

- Transformation
- Golden Ages
- Conflict
- Power

Psychology (A/T/M)

Psychology is the study of the human mind and behaviour. Students develop an understanding of themselves and others by exploring the interactions of biological, social, and psychological factors in individuals and groups.

Students develop scientific inquiry skills. As a science, the subject matter of this course is founded on knowledge and understanding that has been gained through systematic inquiry and scientific research. Scientific literacy is treated as a core underlying principle to the development of deep understanding in the subject. Students are introduced to new discoveries and advances, as well as considering the ethical issues relating to treatment and research. As a result, students learn to think critically, to evaluate evidence, to solve problems and to communicate understanding of human behaviour, thoughts, and feelings scientifically. Students apply evidence-based research to understanding and interpreting data. They develop analytical and critical thinking skills and learn to question and challenge assumptions

about human feelings, thoughts, and behaviour. Students develop skills to communicate effectively, and present logical and coherent arguments.

Units

- Self and Identity
- Cognition and Emotions
- Normality and Abnormality
- Groups and Society
- Independent Study

Robotics and Mechatronics (A/T/M)

This course explores automation and physical computing through the engineering disciplines of robotics and mechatronics. The course introduces fundamental principles of both electronics and mechatronics before investigating microcontrollers that can be programmed to drive electrical circuits and mechanical systems.

Students apply their knowledge to the design and construction of real systems, examining how these solutions address problems, needs and challenges faced by individuals and societies. They design and program control software for autonomous and manual interfaces, correcting for noise and unexpected variations in data inputs and processing.

Robotics and Mechatronics aims to build theoretical and practical knowledge to prepare students for technical pathways such as engineering, IT, electronics and science.

Units

- Building and Programming Circuits
- Digital and Analog Interactions
- Robotics and Mechatronic Systems
- Applications of Robotics
- Independent Study

Social and Community Work (A/T/M)

In Social and Community Work, students explore the ways in which individuals and communities are shaped and operate, and the interventions that can be made to empower individuals and groups. They investigate the nature of wellbeing, social cohesion, and community life. Students examine theories, concepts and ideas from the social sciences and social work and draw upon them to understand how individuals relate to their environment.

Units

- Community Organisations
- Societies and Communities
- Children and Young People
- Contemporary Ageing
- Independent Study

Sociology (A/T/M)

Sociology empowers students to develop an understanding of how subjectivity and society are interconnected, thereby allowing them to better appreciate how their own identities, beliefs, struggles, and experiences are profoundly shaped and reshaped through the interplay between micro and the macro dimensions, across time and space. Sociology allows students to explore the how and why of human behaviour, with a particular focus on gender, race, class, and intersectionality.

Units

- Constructing Identity
- Understanding Difference
- Applying Sociology
- Structure and Agency
- Independent Study

Specialised Dance (A/T/M)

In *Specialised Dance*, students learn as artists, innovators, leaders, and entrepreneurs, by making and interpreting dance performances that communicate ideas and interdisciplinary concepts to audiences. They learn as audiences, by responding critically to dance. Students develop skills in appreciating, choreographing, teaching, leading, performing and producing dance. In Dance, movement is a knowledge. Students learn as they engage with the history, lineage, technical dance skills, practices, innovations, leadership and entrepreneurship of the dancers and choreographers that come before them and become literate in the vocabularies of a range of styles and forms.

Units

- Innovation in Dance
- Leadership in Dance
- Entrepreneurship in Dance
- Interdisciplinary Inquiry in Dance
- Independent Study

Specialised Drama (A/T/M)

In *Specialised Drama*, students have agency to explore innovation, entrepreneurship, and leadership within the Arts. They conduct in-depth creative inquiries into personal, local, and global challenges. Students refine their self-management, problem solving, intrapersonal and interpersonal skills. They apply critical and creative thinking and display capacity to be resourceful and take risks. Students experience the challenge and pleasure that comes from the study of drama that can be transferred to a range of careers and situations.

Units

- Innovation in Drama
- Leadership in Drama

- Entrepreneurship in Context
- Interdisciplinary Inquiry in Drama
- Independent Study

Specialised Media (A/T/M)

The study of Specialised Media develops knowledge and understanding of traditional, contemporary, and emerging media practices through engagement with media works from a range of different styles, times, places, and cultures. Through exploration of innovation, adaptation, entrepreneurship and interdisciplinary inquiry, students understand that media stems from traditions, that media is dynamic and changes over time and that media works differ widely in different contexts. They learn as consumers and content creators, by responding critically to media products, concepts, and theories. Through theories of communication and evaluation of media products, students enrich their intercultural understanding.

Units

- Innovation in Media
- Adaptation in Media
- Entrepreneurship in Media
- Interdisciplinary Inquiry in Media
- Independent Study

Specialist Mathematics (T)

Specialist Mathematics provides opportunities, beyond those presented in Mathematical Methods, to develop rigorous mathematical arguments and proofs, and to use mathematical and statistical models more extensively.

Specialist Mathematics has been designed to be taken in conjunction with Specialist Methods.

Specialist Mathematics is designed for students with a strong interest in mathematics, including those intending to study mathematics, statistics, and engineering, or advanced study in all sciences and associated fields.

Units

- Unit 1 – Combinatorics, Vectors in the Plane and Geometry
- Unit 2 – Trigonometry, Real and Complex Numbers and Matrices
- Unit 3 – Vectors in Three Dimensions, Complex Numbers
- Unit 4 – Applications of Integration, Differential Equations and Statistical Inference

This course is for the mathematically talented. Students considering Specialist Mathematics should have achieved success in Year 10 Advanced Maths. It is an important course for those who may wish to use Mathematics as a focus of tertiary studies.

This course is only available as a double major or major/minor. All Specialist Mathematics students must also be enrolled in Mathematical Methods. At the end of Year 12 Specialist Maths students should have completed a major in Mathematical Methods and either a minor

or major in Specialist Mathematics. These two courses will combine to create either a major/minor or double major in Specialist Mathematics.

Specialist Methods (T)

Specialist Methods has been designed to be taken in conjunction with Specialist Mathematics. It extends the coursework from the Mathematical Methods course.

The major themes of Specialist Methods are calculus and statistics. They include as necessary prerequisites studies of algebra, functions and their graphs, and probability.

Together, mathematics and statistics provide a framework for thinking and a means of communication that is powerful, logical, concise and precise.

The subject Specialist Methods is designed for students with a strong interest in mathematics, including those intending to study mathematics, statistics, and engineering, or advanced study in all sciences and associated fields.

Units

- Unit 1 – Topic 1 – Functions and Graphs, Topic 2 –Trigonometric Functions – Topic 3 – Counting and Probability
- Unit 2 – Topic 1 – Exponential Functions, Topic 2 – Arithmetic and Geometric Sequences and Series, Topic 3 – Introduction to Differential Calculus
- Unit 3 – Topic 1 – The Logarithmic Function, Topic 2 – Further Differentiation and Applications, Topic 3 – Integrals
- Unit 4 – Topic 1 – Simple Linear Regression, Topic 2 – Discrete Random Variables, Topic 3 – Continuous Random Variable and the Normal Distribution, Topic 4 – Interval Estimates for Proportions

Specialised Music (A/T/M)

Music is unique as an aural art form that develops cognitive, kinaesthetic, empathetic, and aesthetic capacities in students. The study of music enables critical and creative thinking, the development of technical skills, and the opportunity to grow as artists and communicate their perspective on the world. Students in *Specialised Music* gain opportunities to refine their music skills in a variety of professional contexts. This course has been written with open expectations around prior technical skills. This is intended to increase access to students from a wide range of musical backgrounds, traditions, and experiences. Teachers will make judgements and form expectations in line with the achievement standards but apply them to a wide range of music making activities.

Units

- Innovation in Music
- Music Leadership
- Entrepreneurship in Music
- Interdisciplinary Inquiry in Music
- Independent Study

Specialised Photography (A/T/M)

In *Specialised Photography*, students explore innovation, interdisciplinary experimentation, and entrepreneurship within the field of photography. They apply critical and creative thinking to undertake in-depth inquiry into issues relating to self, others and world and apply their insights into photographic practice. Students use their understanding of a range of photographic applications to select and use technical and conceptual approaches to communicate intended meanings.

Units

- Innovation in Photography
- Photographic Exhibitions
- Entrepreneurship in Photography
- Interdisciplinary Inquiry in Photography
- Independent Study

Specialised Visual Arts (A/T/M)

The study of Visual Arts develops knowledge and understanding of traditional and contemporary art works through engagement with innovative art practice, curatorial appreciation, entrepreneurship, and interdisciplinary inquiry. Through exploration of traditional and non-traditional art forms, students develop the technical proficiency and confidence as art makers to communicate their ideas. They learn as consumers and art creators, by responding critically to art works, concepts, and theories, enriching their intercultural understanding. They critically and creatively analyse their world and develop curiosity, knowledge and understanding of the evolving and dynamic nature of the art industry.

Units

- Innovation in Visual Arts
- Curation and Exhibition
- Entrepreneurship in Visual Arts
- Interdisciplinary Inquiry in Visual Arts
- Independent Study

Sports Development (A/T/M)

Sports Development is an integrated study that focuses on specialised sports development for the individual. Students learn about principles of high performance, self-awareness and understanding of their prowess in an individual sport. They learn about and practice ways of maintaining elite performance. This course prepares students aspiring to participate in elite sport.

Units

- Personal Development in a Sport
- Building and Elite Athlete
- Athletes in Society
- Performance Analysis
- Independent Study

Sport, Fitness and Recreation (A/M)

Sport, Fitness and Recreation is a growth industry in Australian society. These industries include social sport, fitness programs and outdoor and community based recreational pursuits. They are an intrinsic part of the Australian psyche and form a substantial part of leisure time. Sports, Fitness and Recreation focuses on the significance these activities have in the life of individuals and communities and the opportunities they hold for improved lifestyle. It is a subject that provides students with the opportunities to develop knowledge, skills and understanding in physical exercise, fitness, and health wellbeing activities, and apply these for purpose in simulated and actual workplace environments.

Units

- Sport, Fitness and Recreation Industry
- Applied Sport, Fitness and Recreation
- Inclusive Sport, Fitness and Recreation
- Community Activities and Events

Timber Products (A/M)

This course equips students with the skills and knowledge to design and create timber-based products, while exploring industry practices, sustainability, ethics, and workplace safety. Students engage in hands-on and design-based learning, gaining a deep understanding of timber as a unique, dynamic material that behaves differently from others throughout its life cycle. Through individual and group projects, students develop key technical, communication and problem-solving skills. They use specialised tools, follow industry processes, and apply design thinking to plan and produce quality timber products. The course fosters responsibility, collaboration, and safe work habits, while preparing students for further study or work in related fields.

Units

- Creating with Timber
- Timber Manufacturing Contexts
- Creating to a Design Process
- Timber Project
- Independent Study

Stage Performance (A/M)

In *Stage Performance*, students learn as performance artists aiming for industry standard, by making and interpreting a play, musical theatre or multimodal performance that communicates to audiences. They learn as audiences, by responding critically to stage performances. Students develop skills in appreciating, creating, performing, and producing stage performances independently and collaboratively for a range of contexts. Students learn as they engage with history of the stage performance genres, technical skills

across disciplines, theories, and concepts, and become literate in the vocabularies and ideas of a range of styles and forms.

Units

- Creativity in Stage Performance
- Narratives in Stage Performance
- Communication in Stage Performance
- Production and Entrepreneurship
- Independent Study

Visual Art (A/T/M)

The study of Visual Arts develops knowledge and understanding of traditional and contemporary art works through engagement with art from a range of different styles, times, places, and cultures. Through exploration of traditional and non-traditional art forms, students develop the technical proficiency and confidence as art-makers to communicate their ideas. They learn as consumers and art creators, by responding critically to art works, concepts, and theories, enriching their intercultural understanding. Students critically and creatively analyse their world and develop curiosity, knowledge and understanding of the evolving and dynamic nature of art.

Units

- Creativity in Visual Arts
- Communicating Meaning in Visual Arts
- Visual Arts in Context
- Narratives in Visual Arts
- Independent Study

NOTE - Please refer to the BSSS website link for more information on any of the courses that have been listed:

https://www.bsss.act.edu.au/act_senior_secondary_system/curriculum/bsss_courses

connect, learn, thrive.