# Victoria University Secondary College



Create The Future

# Senior Secondary Handbook 2025



Create The Future

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#### **Foreword**

"The only way of finding the limits of the possible is by going beyond them into the impossible." Arthur C Clarke

Studying for VCE, VCE Vocational Major and VET presents what is often the biggest challenge students have yet faced in their lives. Our commitment to the students at Victoria University Secondary College is to help them in every way we are able, to stretch their limits and to find out for themselves what is possible.

As a college we aim to see all our students succeed; to reach the goals they set for themselves; to develop their academic and creative talents and to be well prepared to live happy and fulfilled lives. Achievement of this goal is most likely when the school, the teachers, the student and the family work closely together. We want the commitment displayed by students and their families to equal our commitment to them.

Aristotle said: "We are what we repeatedly do. Excellence therefore, is not an act, but a habit."

At Victoria University Secondary College we live by our values:

- Aspire to Achieve
- Strengthen the Community
- · Respect Ourselves and Others

We want our students to achieve excellence. Our staff are highly talented and are committed to using their skills to help students achieve just that. I urge all students to take advantage of this, set their goals and reach great heights.

Elaine Hazim College Principal



#### Welcome

Welcome to Victoria University Secondary College — a school that offers a diverse range of opportunities, experiences and programs of study for students in Years 10, 11 and 12.

This is the time to think carefully about your future and bring it to reality through education. Be brave and creative in your thinking and do not be limited by a fixed mindset. Think about what you want to achieve and explore ways to make it happen. It is always good to begin with what you enjoy and then think about what you are good at both in school and outside school.

Our Senior School Staff will assist you in planning a rewarding program that will help you to achieve your personal goals. Our Careers Team will work with you over the next years to develop and manage your own individual pathway to a great future. The pathway options for you may be varied, so look for ways to keep many options open and enjoy the journey.

Varied pathways through the senior years of schooling are offered that allow students to:

- · Pursue a VCE program, which enables students to choose from a broad range of studies, usually in programs of 22 units completed over two years.
- · Undertake a VCE Vocational Major program, which enables students to achieve specific learning outcomes in literacy and numeracy, as well as practical, vocational competencies and personal development skills.
- Incorporate Vocational Education and Training (VET) units within VCE Vocational Major or VCE programs. A range of vocational certificates is offered, with each program providing the opportunity for students to undertake a work/industry placement.

Victoria University Secondary College is very proud of the high success rate of our senior students and believe that this is a testament to the hard work of all students, parents and teachers working together to achieve common goals. Do read through this booklet and be sure you understand the requirements that must be satisfied to attain your preferred qualifications. There will be plenty of opportunities to meet with people who can assist you in your planning and course selection. We look forward to working with you in the future and trust we can assist students to meet the challenges that lie ahead and make the most of the opportunities.

# Career Planning

Students have VUSC are supported with their career decision making and planning through:

- Career Action Plans at Years 7 12
- My Career Insights program in Year 9
- Career Education Curriculum through Year 9 & 10 Inquiry
- Targeted Careers session in Year 11 and 12 CSGs
- Career Expos and Open Days
- Fortnightly careers newsletter published to our website (see link below)
- Year 12 Career Interviews for all VCE and VCE VM students

The <u>VUSC Careers Website</u> provides information and links to online resources that students can use to explore careers, further education and pathways. Students will also find the weekly Careers Newsletter available on this website.

### **Pathways**

Victoria University College offers two Senior Certificate Courses;

- Victorian Certificate of Education (VCE)
- VCE Vocational Major (VCE VM)

Within these two courses students may undertake;

- Vocational Education and Training (VET)
- Apprenticeships/ Traineeships known as Australian School based Apprenticeships (ASbA or SBATs)
- Headstart

Victoria University Secondary College offers an extensive range of subject choices for students within both Certificates. This enables the College to manage individual career pathways to suit the interests and needs of each student.

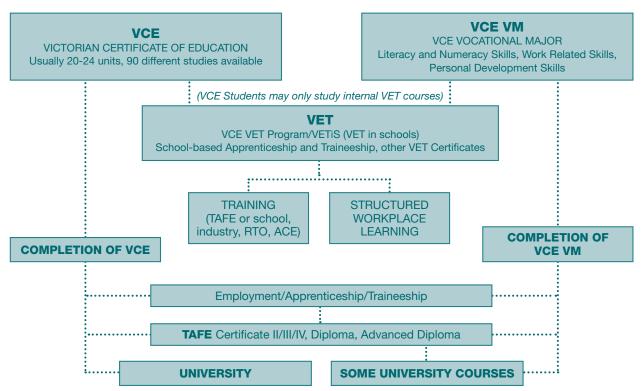
The Senior Secondary Handbook enables students to understand the choices available at Victoria University Secondary College. It firstly invites students to understand which pathway or certificate they may choose to follow.

A summary of the extensive range of VCE, VCE VM and VET Subjects offered at Victoria University Secondary College is included within this handbook.

Students should read carefully the information regarding VCE VM as an alternative Certificate course. Those students who choose the VCE VM are more likely to go to TAFE, undertake a traineeship or complete an apprenticeship, or enter employment directly after completing school.

Within each of the Senior Certificates, students are able to choose a Vocational Education and Training (VET) Program. These programs offer students practical experience in a specific vocational area, as well as gaining a nationally recognised Certificate that may be used as part of their ATAR for VCE (to enter Universities, TAFE). In the case of VCE VM, all students undertake a VET program which provides valuable on-the-job training whilst gaining a certificate recognised anywhere throughout Australia. At Victoria University Secondary College we have specialised facilities for two of the VET certificate courses and we are able to offer a range of VET choices through our Cluster arrangements with local schools and TAFE providers.

# VCE Requirements



The VCE is normally a two-year course of study.

#### Satisfactory Completion of the VCE

Students must satisfactorily complete at least 16 units in order to be awarded the VCE. Included in these 16 units must be:

At least three English related units from:

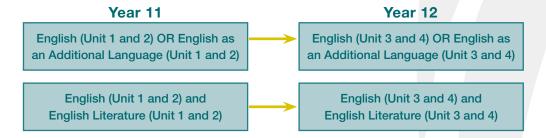
- English Units 1-4
- English as an Additional Language (EAL) Units 1 and 4
- English Literature Units 1-4

No more than two units at Units 1 and 2 level may be selected from English, English as an Additional Language and English Literature toward the unit count for the English requirement.

At least one English subject must be taken at a Unit 3 and 4 level.

An English Unit 3 and 4 sequence must be completed to gain a ATAR.

The possible pathways in English are shown below.



#### VCE Maths

Many students undertake VCE Maths to gain entry to University or TAFE courses but Maths is not compulsory in VCE.

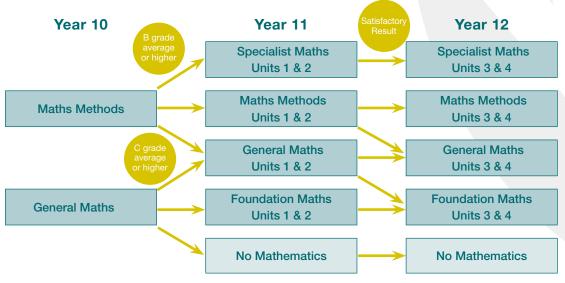
There are four mathematics subjects offered at Year 11

- Foundation Maths (Units 1 and 2)
- General Maths Standard (Units 1 and 2)
- Mathematical Methods (Units 1 and 2)
- Specialist Mathematics (Units 1 and 2)

#### Year 12 Maths Includes:

- Foundation Maths (Units 3 and 4) Offered in 2026
- General Maths Standard (Units 3 and 4)
- Mathematical Methods (Units 3 and 4)
- Specialist Mathematics (Units 3 and 4):

Students must refer to the prerequisites for their preferred maths and speak to their Maths teacher to discuss their VCE Maths choices.



Specialist Mathematics must always be studied in conjunction with Mathematical Methods in both Year 11 and Year 12.

### Satisfactory Completion of a Unit

To satisfactorily complete a unit, students must satisfactorily complete all of the assessment tasks and work requirements and attend at least 90% of timetabled classes for the unit. Work which receives a grade of UG (below 40%) will not be considered a satisfactory completion of an assessment task.

#### Assessment

Students will be assessed according to whether they have achieved the required learning outcomes when completing assessment tasks.

#### For Year 11 subjects, students will receive the following results:

- . S (Satisfactory) or N (Not Satisfactory) for each unit
- · A graded assessment (A-UG) for each assessment task; these grades will appear on students' reports but will not be sent to the VCAA.

#### For Year 12 subjects, students will receive:

- · S (Satisfactory) or N (Not Satisfactory) for each unit
- A numerical score for each assessment task, which will be reported to the VCAA; these scores will be combined with your exam scores to determine your study score for each subject.

Year 12 VCE teachers are not required to give students a letter grade for individual assessment tasks, because scores may change as a consequence of exam results.

Students should refer to the Submission of Work Policy for further information regarding their assessment tasks. The submission of work is an integral part of the teaching and learning process. This policy has been developed to ensure a consistent practice regarding the completion and submission of work across all subjects in years 7-10 and VCE VM within the College. Students are required to meet deadlines to support and promote their academic success.

#### An assessment task will be reported as F (Fail) if students:

- Do not complete work by the due date. (Refer to the Submission of Work Policy for VCE or VCE VM.)
- Do not attend a test or exam.
- Submit work which is plagiarised.

Students that elect to undertake studies in the VCE Units 1-4 will be required to attend extra class periods throughout the year.

The extra class periods will provide students with the opportunity to master their understanding of key concepts and skills taught in Units 1-4.

Class periods may be scheduled at the following times:

- Period 0 = 8.00am session
- Period 5 = at the end of the school day
- Period 4 = on Thursdays

### Extension of Time and Absence from a SAC

A situation may arise where a student is unable to complete a School Assessed Coursework (SAC) on the due date. Students must complete and submit an application for Extension/Redemption on the correct form. A medical certificate is required for any absence from a SAC. Without a medical certificate or valid excuse approved by the Senior School Leader a student can sit the SAC for an S but may not obtain a score.

#### Attendance

Students must attend all timetabled classes. If an absence has occurred, the student must give their Home Group Teacher a medical certificate or an absence note written and signed by a parent/guardian.

It is the responsibility of any student who is absent to find out what work was covered in missed classes and any work that may have been set during that time.

Students need to attend classes regularly to complete coursework and assessment tasks. Any student who does not attend at least 90% of timetabled classes for a unit may receive a Not Satisfactory (N) assessment for the unit because of poor attendance.

During study periods, students must be working in the Study Centre.

If a student needs to leave school early, they must gain permission from a Year 11 / 12 Coordinator or the Senior School Leader.

# Australian Tertiary Admission Rank — ATAR

Students who complete VCE and satisfy the requirements receive an ATAR which may be used for entry into a range of Tertiary courses.

How is the ATAR calculated?

- · The scaled score in English, English Literature or EAL
- The next best THREE scaled scores
- 10% of any 5th and/or 6th scaled scores

Which studies are used to get an ATAR?

- All VCE Unit 3 / 4 studies, however, no more than two Languages at Unit 3 and 4 level
- No more than two VCE Mathematics studies at Unit 3 and 4 level may count in the primary four. Any other Maths or Language is counted as a 5th or 6th subject



# Senior Studies

# VCE Subjects

Accountin	g	Units 1–4
Art - Creat	tive Practice	Units 1-4
Biology		Units 1-4
Business I	Management	Units 1-4
Chemistry		Units 1-4
Chinese		Units 1-4
Applied Co	omputing (VCE)	
	– Applied Computing	Units 1 and 2 only
-	- Data Analytics	Units 3 and 4 only
-	- Software Development	Units 3 and 4 only
Drama		Units 1-4
Economic	s	Units 1-4
English		
	– English	Units 1-4
	- English as an Additional Language	Units 1-4
Environme	ental Science	Units 1-4
Extended	Investigation	Units 3 and 4 only
Food Stud	lies	Units 1-4
Geograph	у	Units 1-4
Health and	d Human Development	Units 1-4
History		
	- Twentieth Century	Units 1 and 2 only
	– Revolutions	Units 3 and 4 only
Legal Stud	dies	Units 1-4
Literature		Units 1-4
Mathemat	ics	
	- Foundation Mathematics	Units 1-4
	- General Mathematics	Units 1-4
	- Mathematics Methods	Units 1-4 CAS
	- Specialist Mathematics	Units 1-4
Media		Units 1-4
Music		Units 1-4
	- Music Units	Units 1-2
	- Music Contemporary Performance Units	Units 3-4
	– Music Repertoire	Units 3-4
Outdoor a	nd Environmental Studies Units	Units 1-4
Philosoph	y	Units 1-4
Physical E	ducation	Units 1-4
Physics		Units 1-4
Psycholog	у	Units 1-4
Systems E	Engineering	Units 1-4
Visual Communication Design		Units 1-4

# VCE Program for 2025/2026

Year 11 VCE Subject VCE Subject English VCE Subject VCE Subject VCE Subject

Year 12 VCE Subject VCE Subject VCE Subject English VCE Subject



# VCE Subjects offered at Victoria University Secondary College

For a more detailed course description, please visit the Study Design on the VCAA website at www.vcaa.vic.edu.au

### ACCOUNTING

Units 1 and 2 Units 3 and 4

#### Rationale

VCE Accounting explores the financial recording, reporting, analysis and decision-making processes of a sole proprietor small business. Students study both theoretical and practical aspects of accounting. They collect, record, report and analyse financial data, and report, classify, verify and interpret accounting information, using both manual methods and information and communications technology (ICT).

Students apply critical thinking skills to a range of business situations to model alternative outcomes and to provide accounting advice to business owners. Accounting plays an integral role in the successful operation and management of businesses.

#### Structure

All units focus on accounting and finance for sole-proprietors and small businesses. The study is made up of four units.

#### Unit 1 – Role of Accounting in Business

This unit explores the establishment of a business and the role of accounting in the determination of business success or failure. In this, it considers the importance of accounting information to stakeholders. Students analyse, interpret and evaluate the performance of the business using financial and non-financial information. They use these evaluations to make recommendations regarding the suitability of a business as an investment. Students record financial data and prepare reports for service businesses owned by sole proprietors.

#### Unit 2 – Accounting and Decision-making for a Trading Business

In this unit students develop their knowledge of the accounting process for sole proprietors operating a trading business, with a focus on inventory, accounts receivable, accounts payable and non-current assets. Students use manual processes and ICT, including spreadsheets, to prepare historical and budgeted accounting reports. Students analyse and evaluate the performance of the business relating to inventory, accounts receivable, accounts payable and non-current assets. They use relevant financial and other information to predict, budget and compare the potential effects of alternative strategies on the performance of the business. Using these evaluations, students develop and suggest to the owner strategies to improve business performance.

#### Unit 3 – Financial Accounting for a Trading Business

This unit focuses on financial accounting for a trading business owned by a sole proprietor, and highlights the role of accounting as an information system. Students use the double entry system of recording financial data and prepare reports using the accrual basis of accounting and the perpetual method of inventory recording. Students develop their understanding of the accounting processes for recording and reporting and consider the effect of decisions made on the performance of the business. They interpret reports and information presented in a variety of formats and suggest strategies to the owner to improve the performance of the business.

#### Unit 4 - Recording, Reporting, Budgeting and Decision-making

In this unit students further develop their understanding of accounting for a trading business owned by a sole proprietor and the role of accounting as an information system. Students use the double entry system of recording financial data, and prepare reports using the accrual basis of accounting and the perpetual method of inventory recording. Both manual methods and ICT are used to record and report. Students extend their understanding of the recording and reporting process with the inclusion of balance day adjustments and alternative depreciation methods. They investigate both the role and importance of budgeting in decision-making for a business. They analyse and interpret accounting reports and graphical representations to evaluate the performance of a business. From this evaluation, students suggest strategies to business owners to improve business performance.

#### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 and Unit 4 as a sequence.

#### Assessment – Satisfactory Completion

The award of satisfactory completion for a unit is based on the teacher's decision that the student has demonstrated achievement of the set of outcomes specified for the unit. Demonstration of achievement of outcomes and satisfactory completion of a unit are determined by evidence gained through the assessment of a range of learning activities and tasks.

#### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Procedures for the assessment of levels of achievement in Units 1 and 2 are a matter for school decision. Assessment of levels of achievement for these units will not be reported to the VCAA. Schools may choose to report levels of achievement using grades, descriptive statements or other indicators.	School-assessed coursework and examinations Unit 3 school-assessed coursework: 25 % Unit 4 school-assessed coursework: 25 % End-of-year examination: 50 %

For further information please see the VCAA Accounting Study Design

# APPLIED COMPUTING (VCE)

#### Rationale

Technology continues to evolve rapidly, providing opportunities for enterprising individuals to create new technologies and innovative uses for existing technologies. This study equips students with the knowledge and skills required to adapt to a dynamic technological landscape, including the ability to identify emerging technologies, envisage new uses for digital technologies and consider the benefits that these technologies can bring to society at a local and at a global level.

VCE Applied Computing facilitates student-centred learning that enables students to build capabilities in critical and creative thinking, and to develop communication and collaboration, and personal, social and information and communications technology (ICT) skills. Students are provided with practical opportunities and choices to create digital solutions for real-world problems in a range of settings.

VCE Applied Computing provides a pathway to further studies in areas such as business analysis, computer science, cybersecurity, data analytics and data science, data management, games development, ICT, networks, robotics, software engineering and telecommunications, and other careers relating to digital technologies.

#### Unit 1 - Applied Computing

In this unit, students are introduced to the stages of the problem-solving methodology. Students focus on how data can be used within software tools such as databases and spreadsheets to create data visualisations, and the use of an object-oriented programming (OOP) language to develop a working software solution.

In Area of Study 1, as an introduction to data analytics, students respond to teacher-provided solution requirements, designs and data to develop data visualisations. They develop a solution that includes a database, spreadsheet(s) and data visualisations. In Area of Study 2, students respond to solution requirements to design and develop a working software solution using an OOP language. They develop techniques for debugging and testing their software solution to ensure that it works as intended.

#### Unit 2 - Applied Computing

In this unit, students focus on developing an innovative solution to a problem, need or opportunity that they have identified, and develop an understanding of network environments, cyber security risks, threats to networks and strategies to reduce the risks to data and information.

In Area of Study 1, students work collaboratively and select a topic of interest involving an emerging trend for further study to create an innovative solution. The innovative solution can be presented as a proof of concept, a prototype or a product. Students engage in all areas of the problem-solving methodology while developing this solution. In Area of Study 2, as an introduction to cyber security, students investigate networks and the threats, vulnerabilities and risks to data and information. They propose and justify strategies to protect the security of data and information within a network.

#### Unit 3 - Data Analytics

In this unit, students apply the problem-solving methodology to analyse data using software tools such as database, spreadsheet and data visualisation software to create data visualisations. Students develop an understanding of the analysis, design and development stages of the problem-solving methodology.

In Area of Study 1, students respond to teacher-provided solution requirements and designs to develop data visualisations. They apply specific functions of database and spreadsheet software tools to manipulate, cleanse and analyse data. Students then use a data visualisation software tool to develop data visualisations that present their findings. In Area of Study 2, students propose a research question, prepare a project plan, collect, analyse and prepare data, and design infographics and/or dynamic data visualisations. Area of Study 2 forms the first part of the school-assessed Task (SAT) that is completed in Unit 4, Area of Study 1.

#### Unit 4 – Data Analytics

In this unit, students focus on determining the findings of a research question by developing infographics and/ or dynamic data visualisations based on large complex data sets, consider data breaches and investigate the security strategies used by an organisation to protect data and information from cyber security threats.

In Area of Study 1, students apply the problem-solving stages of development and evaluation to develop their preferred designs prepared in Unit 3, Area of Study 2 into infographics and/or dynamic data visualisations. They evaluate the infographics and/or dynamic data visualisations and assess the project plan. Area of Study 1 forms the second part of the school-assessed Task (SAT). In Area of Study 2, students analyse a case study that investigates the impact of a data breach on an organisation. They examine the cyber security threats to data and information, evaluate security strategies and recommend improved strategies for protecting data and information.

#### Entry

No prerequisites for entry to Units 1, 2 and 3. Students are recommended to be concurrently enrolled in at least one maths if choosing Software Development. Students must undertake Unit 3 prior to undertaking Unit 4.

#### Assessment - Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

#### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	Unit 3 school-assessed coursework: Unit 4 school assessed coursework: School Assessed Task: End of Year Examination:	10 % 10 % 30% 50%

For further information please see the VCAA Applied Computing Study Design



VCE Art Creative Practice uses inquiry through art practice to develop students' critical and creative thinking skills and individual responses through researching, exploring, experimenting, developing, reflecting, refining, and resolving. Through Making and Responding, and through the presentation of artworks in different contexts, students understand and appreciate the role of visual art in past and present traditions, societies, and cultures.

#### Structure

The study is made up of four units.

- Unit 1: Interpreting artworks and exploring the Creative Practice
- Unit 2: Interpreting artworks and developing the Creative Practice
- Unit 3: Investigation, ideas, artworks, and the Creative Practice
- Unit 4: Interpreting, resolving, and presenting artworks and the Creative Practice

Each unit deals with specific content contained in areas of study and is designed to enable students to achieve a set of outcomes for that unit. Each outcome is described in terms of key knowledge and key skills.

#### Unit 1 – Interpreting Artworks and Exploring the Creative Practice

In Unit 1 students use Experiential learning in Making and Responding to explore ideas using the Creative Practice. As the artist and audience, students consider their connection to artworks, and how their communication of ideas and presentation of artworks challenge, shape and influence viewer or audience perspectives.

They focus on the making of art and examine how artists communicate ideas and meaning in artworks. They examine artists in different societies, cultures and historical periods and develop their own interpretations and viewpoints about the meanings and messages of artworks. They explore how artists create new ways of thinking and representation, while developing their own art practice.

#### Unit 2 – Interpreting Artworks and Developing the Creative Practice

In Unit 2 students use Inquiry learning to investigate the artistic and collaborative practices of artists. They use the Cultural Lens, and the other Interpretive Lenses as appropriate, to examine artworks from different periods of time and cultures, and to explore the different ways that artists interpret and communicate social and personal ideas in artworks.

Students explore the collaborative practices of artists and use the Creative Practice to make and present artworks. They develop visual responses based on their investigations, exploring the way historical and contemporary cultural contexts, ideas and approaches have influenced the artworks and the practices of the artists they investigate, as well as their own art practice.

#### Unit 3 – Investigation, Ideas, Artworks, and the Creative Practice

In this unit students use Inquiry and Project-based learning as starting points to develop a Body of Work. They explore ideas and experiment with materials, techniques and processes using the Creative Practice. The research of historical and contemporary artists is integral to students' use of the Creative Practice and informs the basis of their investigation. Students also investigate the issues that may arise from the artworks they view and discuss. or those evolving from the practice of the artist. Unit 3 commences with students researching the practice of a selected artist as the starting point to develop a finished artwork. The finished artwork will contribute to the Body of Work developed over Units 3 and 4.

In Unit 3, the Interpretive Lenses are used in Making and Responding throughout the students' art practice. Students apply the Interpretive Lenses to researched artworks and in their reflective analysis and evaluation of their use of the Creative Practice. They use critical and creative thinking skills to explore and develop ideas, and experiment with materials, techniques, and processes.

# ART CREATIVE PRACTICE CONTINUED... Units 1 and 2 Units 3 and 4

#### Unit 4 – Interpreting, Resolving and Presenting Artworks and the Creative Practice

In Unit 4 students continue to develop their art practice through Project-based and Inquiry learning as their research and exploration continues to support the development of their Body of Work. Throughout their research students study the practices of selected historical and contemporary artists to inform their own art practice. They use the Interpretive Lenses to analyse, compare and interpret the meanings and messages of artworks produced by the artists they study. Students also apply the Interpretive Lenses throughout the Creative Practice to resolve and refine their Body of Work.

Students continue to build upon the ideas begun in Unit 3 and present a critique of their use of the Creative Practice. They reflect on the feedback from their critique to further refine and resolve a Body of Work that demonstrates their use of the Creative Practice and the realisation of their personal ideas. The students present their Body of Work to an audience accompanied by documentation of their use of the Creative Practice.

#### Entry

There are no prerequisites for entry to Units 1, 2 and 3; however, Units 1 and 2 form the foundation of the key knowledge and key skills for Units 3 and 4. Students must undertake Unit 3 and Unit 4 as a sequence.

#### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

#### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Individual school decision on levels of achievement.	Unit 3 and 4 School Assessed Coursework: 10% Unit 3 and 4 School Assessed Task: 60% End of Year Examination: 30%

For further information please see the VCAA Art creative Practice Study Design



Biology is the study of living organisms, of life processes, and of the different levels of organisation from the cell to the biosphere. It includes the study of interactions between organisms and between organisms and their environments. It considers the unity and continuity of life as well as diversity and change.

#### Structure

The study is made up of four units.

#### Unit 1 – How Do Living Things Stay Alive?

Students examine the structure and functioning of prokaryotic and eukaryotic cells, and how the plasma membrane contributes to survival by controlling the movement of substances into and out of the cell. Students explore cellular growth, replacement and death. They become familiar with the key events and regulation of the cell cycle and the processes for cell division, including disruptions to the cell cycle and deviant cell behaviour. Students consider the properties of stem cells and their role in differentiation, specialisation and renewal of cells and tissues.

In addition, students explore how systems function through cell specialisation in vascular plants and in digestive, endocrine and excretory systems in animals, focusing on regulation of water balance in plants, and temperature, blood glucose and water balance in animals. Students examine how homeostatic mechanisms in animals help maintain their internal environment within a narrow range of tolerance levels, and consider malfunctions in homeostatic mechanisms.

Survival of organisms requires control and regulation of factors within an organism and often outside an organism. Different types of cells and adaptations enhance an organism's survival in a particular environment, while homeostatic mechanisms maintain the internal environment.

Lastly, students adapt or design and then conduct a scientific investigation to generate appropriate qualitative and/or quantitative data, organise and interpret the data, and reach a conclusion in response to the research question.

The student-adapted or student-designed scientific investigation relates to knowledge and skills developed in Area of Study 1 and/or Area of Study 2.

#### Unit 2 – How Is Continuity Of Life Maintained?

Students describe the production of gametes in sexual reproduction through the key events in meiosis. They explore the nature of chromosomes and the use of genetic language to read and interpret patterns of inheritance and predict outcomes of genetic crosses.

Students explain how a characteristic or trait can be influenced by one gene, many genes acting together, and genes interacting with external environmental or epigenetic factors. They apply their genetic knowledge to analyse pedigree charts, determine patterns of inheritance and predict outcomes of genetic crosses.

Students analyse the advantages and disadvantages of asexual and sexual reproduction and investigate the use and application of reproductive cloning technologies. Students explore the biological importance of genetic diversity and the structural, physiological and behavioural adaptations that enable species to survive in an ecosystem.

Students explore the interdependencies between species, including the importance and impact of keystone species and top predators. They consider the contributions of Aboriginal and Torres Strait Islander knowledge and perspectives to the understanding of the adaptations of, and interdependencies between, species in Australian ecosystems.

Students are provided an opportunity to explore a contemporary bioethical issue relating to the application of genetic knowledge, reproductive science, inheritance or adaptations and interdependencies beneficial for survival.

Examples of investigation topics include, but are not limited to: genomic and epigenetic research; cloning for agriculture, horticulture or other purposes; assisted reproductive technologies; prenatal and predictive genetic testing; strategies for maintaining genetic diversity within a species or population; the impact of introduced species; changes to specific keystone species on populations and ecosystems; or the use of biomimicry to solve human challenges or biopiracy of Indigenous knowledge.

#### Unit 3 – How do cells maintain life?

In this unit students investigate the workings of the cell from several perspectives. They explore the relationship between nucleic acids and proteins as key molecules in cellular processes. Students analyse the structure and function of nucleic acids as information molecules, gene structure and expression in prokaryotic and eukaryotic cells and proteins as a diverse group of functional molecules. They examine the biological consequences of manipulating the DNA molecule and applying biotechnologies.

Students explore the structure, regulation, and rate of biochemical pathways, with reference to photosynthesis and cellular respiration. They explore how the application of biotechnologies to biochemical pathways could lead to improvements in agricultural practices.

Students apply their knowledge of cellular processes through investigation of a selected case study, data analysis and/or a bioethical issue. Examples of investigation topics include, but are not limited to: discovery and development of the model of the structure of DNA; proteomic research applications; transgenic organism use in agriculture; use, research and regulation of gene technologies, including CRISPR-Cas9; outcomes and unexpected consequences of the use of enzyme inhibitors such as pesticides and drugs; research into increasing efficiency of photosynthesis or cellular respiration or impact of poisons on the cellular respiration pathway.

#### Unit 4 – How does life change and respond to challenges over time?

In this unit students consider the continual change and challenges to which life on Earth has been, and continues to be, subjected to. They study the human immune system and the interactions between its components to provide immunity to a specific pathogen. Students consider how the application of biological knowledge can be used to respond to bioethical issues and challenges related to disease.

Students consider how evolutionary biology is based on the accumulation of evidence over time. They investigate the impact of various change events on a population's gene pool and the biological consequences of changes in allele frequencies. Students examine the evidence for relatedness between species and change in life forms over time using evidence from paleontology, structural morphology, molecular homology and comparative genomics. Students examine the evidence for structural trends in the human fossil record, recognising that interpretations can be contested, refined or replaced when challenged by new evidence.

Students demonstrate and apply their knowledge of how life changes and responds to challenges through investigation of a selected case study, data analysis and/or bioethical issue. Examples of investigation topics include, but are not limited to: deviant cell behaviour and links to disease; autoimmune diseases; allergic reactions; development of immunotherapy strategies; use and application of bacteriophage therapy; prevention and eradication of disease; vaccinations; bioprospecting for new medical treatments; trends, patterns and evidence for evolutionary relationships; population and species changes over time in non-animal communities such as forests and microbiota; monitoring of gene pools for conservation planning; role of selective breeding programs in conservation of endangered species; or impact of new technologies on the study of evolutionary biology.

#### Entry

There are no prerequisites for entry to Units 1 and 2. Unit 2 should be completed prior to Unit 3.

Students must undertake Unit 3 prior to undertaking Unit 4.

#### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

#### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Individual school decision on levels of achievement.	School-assessed coursework and end-of-year examination Unit 3 school-assessed coursework: 20 % Unit 4 school-assessed coursework: 30 % Units 3 and 4 examination: 50 %

For further information please see the VCAA Biology Study Design

In contemporary Australian society there are a range of businesses managed by people who establish systems and processes to achieve a variety of objectives. These systems and processes are often drawn from historical experience and management theories designed to optimise the likelihood of achieving success. In studying VCE Business Management, students develop knowledge and skills that enhance their confidence and ability to participate effectively as socially responsible and ethical members, managers and leaders of the business community, and as informed citizens, consumers and investors. The study of Business Management leads to opportunities across all facets of the business and management field such as small business owner, project manager, human resource manager, operations manager or executive manager. Further study can lead to specialisation in areas such as marketing, public relations and event management.

#### Structure

The study is made up of four units.

#### Unit 1 – Planning a Business

Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. Therefore how businesses are formed and the fostering of conditions under which new business ideas can emerge are vital for a nation's wellbeing. Taking a business idea and planning how to make it a reality are the cornerstones of economic and social development. In this unit students explore the factors affecting business ideas and the internal and external environments within which businesses operate, and the effect of these on planning a business.

#### Unit 2 – Establishing a Business

This unit focuses on the establishment phase of a business's life. Establishing a business involves complying with legal requirements as well as making decisions about how best to establish a system of financial record keeping, staff the business and establish a customer base. In this unit students examine the legal requirements that must be satisfied to establish a business. They investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping. Students analyse various management practices in this area by applying this knowledge to contemporary business case studies from the past four years.

#### Unit 3 - Managing a Business

In this unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relationship between each of these. Students investigate strategies to manage both staff and business operations to meet objectives.

#### Unit 4 - Transforming a Business

Businesses are under constant pressure to adapt and change to meet their objectives. In this unit students consider the importance of reviewing key performance indicators to determine current performance and the strategic management necessary to position a business for the future. Students study a theoretical model to undertake change, and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance. They investigate the importance of leadership in change management.

#### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

#### Assessment – Satisfactory Completion

The award of satisfactory completion for a unit is based on the teacher's decision that the student has demonstrated achievement of the set of outcomes specified for the unit. Demonstration of achievement of outcomes and satisfactory completion of a unit are determined by evidence gained through the assessment of a range of learning activities and tasks.

#### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Procedures for the assessment of levels of achievement in Units 1 and 2 are a matter for school decision.	Unit 3 school-assessed coursework: 25 % Unit 4 school-assessed coursework: 25 % Units 3 and 4 examination: 50 %

For further information please see the VCAA Business Management Study Design

Chemistry is a key science in explaining the workings of our universe through an understanding of the properties and interaction of substances that make up matter. Most processes, from the formation of molecules in outer space to the complex biological interactions occurring in cells, can be described by chemical theories. Chemistry is used to explain natural phenomena at the molecular level, as well as create new materials such as medicines and polymers.

#### Structure

The study is made up of four units.

#### Unit 1 – How can the Diversity of Material be explained?

Students investigate the development and use of materials for specific purposes is an essential human endeavour. In this unit, students examine various materials' chemical structures and properties, including covalent compounds, metals, ionic compounds, and polymers. They are introduced to ways that chemical quantities are measured. They consider how manufacturing innovations produce more sustainable products for society using renewable raw materials and a transition from a linear economy towards a circular economy.

Students conduct practical investigations involving the reactivity series of metals, separation of mixtures by chromatography, use of precipitation reactions to identify ionic compounds, determination of empirical formulas, and synthesis of polymers.

A student-directed research investigation into the sustainable production or use of selected material is to be undertaken in Area of Study 3. The analysis explores how sustainability factors such as green chemistry principles and the transition to a circular economy are considered in producing materials to ensure minimum toxicity and impacts on human health and the environment. The investigation draws on crucial knowledge and critical science skills from Area of Study 1 and Area of Study 2.

#### Unit 2 – How do Chemical Reactions shape the Natural World?

In Unit 2, students explore the dependence on the work of chemists to analyse the materials and products in everyday use. In this unit, students' study and compare different substances dissolved in water and the gases that may be produced in chemical reactions. They explore applications of acid-base and redox reactions in society.

Students conduct practical investigations involving the specific heat capacity of water, acid-base and redox reactions, solubility, the molar volume of a gas, volumetric analysis, and the use of a calibration curve.

A student-adapted or student-designed scientific investigation is undertaken in Area of Study 3. The research involves the generation of primary data and is related to the production of gases, acid-base or redox reactions, or the analysis of substances in water. It draws on the fundamental science skills and critical knowledge from Unit 2 Area of Study 1 and Area of Study 2.

Throughout both units, students use chemistry terminology, including symbols, formulas, chemical nomenclature, and equations, to represent and explain observations and data from their investigations and to evaluate the chemistry-based claims of others.

#### Unit 3 – How can Design and Innovation Help to Optimise Chemical Processes?

In this unit, students explore the chemical production of energy and materials while considering innovation, design, and sustainability principles. They analyse various fuels as energy sources, examining energy transformations, efficiencies, environmental impacts, and applications. Additionally, they delve into the role of food in providing energy in living systems. Students evaluate different types of cells—galvanic, fuel, rechargeable, and electrolytic regarding their suitability for meeting society's energy and material needs. They also study chemical processes, including factors influencing reaction rates and extent, and methods for controlling reaction rates and minimising unwanted by-products. Practical investigations cover thermochemistry, redox reactions, electrochemical cells, reaction rates, and equilibrium systems. Throughout the unit, students utilise chemistry terminology to represent and explain observations and data and evaluate claims. A key component is a student-designed scientific investigation, which involves generating primary data related to energy or chemical production or organic compound analysis or synthesis. This investigation culminates in a scientific poster presentation, assessed in Unit 4 Outcome 3.

#### Unit 4 - How are Carbon-based Compounds Designed for Purpose?

In Unit 4 students will explore the structures and reactions of carbon-based organic compounds, which play a vital role in fuels, foods, medicines, polymers, and various everyday materials. They will learn about the green chemistry principles that guide the production of synthetic organic compounds, as well as food metabolism and the mechanisms of action of medicines within the body. The students will also explore laboratory analysis techniques and instrumentation methods for identifying organic compounds and ensuring product purity. The practical investigations will involve the synthesis and analysis of organic compounds, covering reaction pathways, organic synthesis, functional group identification, redox titrations, solvent extraction, and distillations.

Throughout the unit, students will use chemistry terminology, including symbols, formulas, chemical nomenclature, and equations, to represent observations and data, and to evaluate claims. A critical component of the unit is a studentdesigned scientific investigation, which involves generating primary data related to energy or chemical production or the analysis/synthesis of organic compounds. This investigation is conducted either in Unit 3 or Unit 4, or across both, and is assessed in Unit 4 Outcome 3. Students will present the design, analysis, and findings of the investigation in a scientific poster format, as outlined in the curriculum.

#### Entry

There are not prerequisites for Unit 1 and 2 although students are strongly encouraged to have undertaken Yr 10 chemistry. Unit 3 and 4 should be undertaken in a sequence with Unit 1 and 2.

#### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

#### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	School-assessed coursework and end-or examination. Unit 3 school-assessed coursework: Unit 4 school-assessed coursework: Units 3 and 4 examination:	f-year 20 % 30 % 50 %



# CHINESE

#### CHINESE SECOND LANGUAGE CHINESE SECOND LANGUAGE ADVANCED

#### The Language

The language to be studied and assessed is the modern standard/official version of Chinese.

For the purpose of this study. Modern Standard Chinese is taken to be Putonghua in the spoken form, and simplified character text in the written form. Throughout the Chinese-speaking communities, Modern Standard Chinese may also be known as Mandarin, Guoyu, Huayu, Hanyu, Zhongwen and Zhongguohua.

#### Rationale

The study of Chinese contributes to student personal development in a range of areas including communication skills, intercultural understanding, cognitive development, literacy and general knowledge. Learning and using an additional language encourages students to examine the influences on their perspectives and society, and to consider issues important for effective personal, social and international communication. It enables students to examine the nature of language, including their own, and the role of culture in language, communication and identity. By understanding the process of language learning, students can apply skills and knowledge to other contexts and languages. Learning a language engages analytical and reflective capabilities and enhances critical and creative thinking.

The study of Chinese develops students' ability to understand and use a language which is spoken by about a quarter of the world's population. There are many spoken varieties of Chinese, and Modern Standard Chinese is pre-eminent among these. It is the major language of communication in China, Taiwan and Singapore, and is widely used by Chinese communities throughout the Asia-Pacific region, including Australia.

China's official language is Modern Standard Chinese, or Putonghua (the common or shared language) in Chinese. The language is also referred to as Hanyu, the spoken language of the Han people, or Zhongwen, the written language of China. A number of dialects remain in active use. In addition, the character system has undergone significant evolution, standardisation and simplification over time. In contemporary overseas Chinese media, texts are commonly in either simplified or traditional/full-form characters, reflecting the diverse histories and preferences of these communities. Although both writing systems and the range of dialects should be recognised in any Chinese language curriculum, the priority in education is Modern Standard Chinese and the use of simplified characters as the internationally recognised 'official form' of Chinese.

#### CHINESE SECOND LANGUAGE

A student is not eligible for Chinese Second Language if they have one of the following:

- Twelve (12) months or more education in a school where Chinese is the medium of instruction
- 3 years (36 months) or more residence in any of the VCAA nominated countries or regions including China, Taiwan, Hong Kong and Macau.

#### CHINESE SECOND LANGUAGE ADVANCED

A student is eligible for Chinese Second Language Advanced if:

- They have had no more than 7 years of education in a school where Chinese is the medium of instruction
- The highest level of education attained in a school where Chinese is the medium of instruction is no greater than the equivalent of Year 7 in a Victorian school.

The time periods referred to in these criteria will be counted cumulatively since the time of the student's birth. Students may use traditional characters in writing but must be able to read simplified characters.

#### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 and Unit 4 as a sequence. Units 1 to 4 are designed to a standard equivalent to the final two years of secondary education. All VCE studies are benchmarked against comparable national and international curricula.

VCE Chinese Second Language is designed for students who have typically studied the language for at least 200 hours prior to the commencement of Unit 1.

Entry to VCE Chinese Second Language is governed by eligibility criteria which are published on the VCAA website and in the VCE and VCAL Administrative Handbook.

#### Duration

Each unit involves at least 50 hours of scheduled classroom instruction

#### Unit 1

In this unit students develop an understanding of the language and culture/s of Chinese-speaking communities through the study of three or more topics from the prescribed themes listed on page 12. Each area of study in the unit must focus on a different subtopic. Students access and share useful information on the topics and subtopics through Chinese and consolidate and extend vocabulary and grammar knowledge and language skills. They focus on analysing cultural products or practices including visual, spoken or written texts.

Cultural products or practices can be drawn from a diverse range of texts, activities and creations. These may include the following: stories, poems, plays, novels, songs, films, photographs, artworks, architecture, technology, food, clothing, sports and festivals. Students apply acquired knowledge of Chinese culture and language to new contexts.

Students reflect on the interplay between language and culture, and its impact on the individual's language use in specific contexts and for specific audiences.

#### Unit 2

In this unit students develop an understanding of aspects of language and culture through the study of three or more topics from the prescribed themes listed on page 12. Each area of study must focus on a different subtopic. Students analyse visual, spoken and written texts. They access and share useful information on the topics and subtopics through Chinese and consolidate and extend vocabulary, grammar knowledge and language skills.

Cultural products or practices can be used to demonstrate how culture and perspectives may vary between communities. Students reflect on the interplay between language and culture, and its impact on meaning, understanding and the individual's language use in specific contexts and for specific audiences.

In this unit students investigate the way Chinese speakers interpret and express ideas, and negotiate and persuade in Chinese through the study of three or more subtopics from the prescribed themes and topics. Each area of study must cover a different subtopic, though teachers may choose to teach more than one subtopic in an area of study. Students interpret information, inform others, and reflect upon and develop persuasive arguments. They access and share useful information on the subtopics through Chinese and consolidate and extend vocabulary and grammar knowledge and language skills.

Students consider the influence of language and culture in shaping meaning and reflect on the practices, products and perspectives of the cultures of Chinese-speaking communities. They reflect on how knowledge of Chinese and Chinese-speaking communities can be applied in a range of contexts and endeavours, such as further study, travel, business or community involvement.

#### Unit 4

In this unit students investigate aspects of culture through the study of two or more subtopics from the prescribed themes and topics. Area of Study 1 and Area of Study 2 may focus on the same subtopic. Area of Study 3 should cover a different subtopic to the subtopic/s chosen for Areas of Study 1 and 2. Students build on their knowledge of Chinese-speaking communities, considering cultural perspectives and language and explaining personal observations. Students consolidate and extend vocabulary, grammar knowledge and language skills to investigate the topics through Chinese.

Students identify and reflect on cultural products or practices that provide insights into Chinese-speaking communities. Cultural products or practices can be drawn from a diverse range of texts, activities and creations.

Students reflect on the ways culture, place and time influence values, attitudes and behaviours. They consider how knowledge of more than one culture can influence the ways individuals relate to each other and function in the world.

#### Levels of Achievement

Units 1 and 2		Unit 3 and 4	
Individual school decision on lever Coursework: Examination:	els of achievement. 50% 50%	Percentage contributions to the Chinese are as follows: Coursework – Unit 3: Coursework – Unit 4: Oral Examination: Written Examination:	25% 25% 25% 12.5% 37.5%

#### **External Assessment**

The level of achievement for Units 3 and 4 is also assessed by two end-of-year examinations.

Contribution to final assessment

The examinations together will contribute 50 per cent to the study score.

#### **End-of-year Examinations**

#### Description

- an oral examination
- a written examination.

#### Conditions

The examinations will be completed under the following conditions:

- Duration:
  - Oral examination: approximately 15 minutes
  - Written examination: 2 hours plus 15 minutes reading time.
- Date: end-of-year, on a date to be published annually by the VCAA.
- VCAA examination rules will apply. Details of these rules are published annually in the VCE and VCAL Administrative Handbook.
- The examinations will be marked by assessors appointed by the VCAA.

For further information please see the VCAA Chinese Study Design

In VCE Drama, students tell stories, explore ideas, make sense of their worlds and communicate meaning through the practice of performance-making. The study of drama enables students1 individual and collective identities to be explored, expressed and validated. Students develop an ability to empathise through understanding and accepting diversity. Students draw from, and respond to, contexts and stories that reflect different cultures, genders, sexualities and abilities. Students will also have the opportunity to explore VCE English and Literature texts in depth as part of their stimulus material for ensemble and solo performances. Students will have multiple exposure to studied texts, giving them the ability to investigate the context, characters and themes of a text in great depth for the creation of performances.

VCE Drama connects students to multiple traditions of drama practice across a range of social, historical and cultural contexts. Through the processes of devising and performing drama, students investigate self and others by exploring and responding to the contexts, the narratives and the stories that shape their worlds.

The study of drama introduces students to theories and processes for the creative development of new work and allows them to develop skills as creative and critical thinkers. Students develop an appreciation of drama as an art form through their work as solo and ensemble performers, and engagement with professional contemporary drama practice. They develop skills of communication, criticism, aesthetic understanding and aesthetic control.

VCE Drama equips students with knowledge, skills and confidence to communicate as individuals and collaboratively in a broad range of social, cultural and work-related contexts. The study of drama may provide pathways to training and tertiary study in acting, dramaturgy, theatre-making, script writing, communication and drama criticism.

#### Structure

The study is made up of four units.

#### Unit 1 – Introducing Performance Styles

In this unit students study three or more performance styles from a range of social, historical and cultural contexts. They examine drama traditions of ritual and storytelling to devise performances that go beyond re-creation and/ or representation of real life as it is lived.

This unit focuses on creating, presenting and analysing a devised solo and/or ensemble performance that includes real or imagined characters and is based on stimulus material that reflects personal, cultural and/or community experiences and stories. This unit also involves analysis of a student's own performance work and a work by professional drama performers.

Students apply play-making techniques to shape and give meaning to their performance. They manipulate expressive and performance skills in the creation and presentation of characters, and develop awareness and understanding of how characters are portrayed in a range of performance styles. They document the processes they use as they explore a range of stimulus material, and experiment with production areas, dramatic elements, conventions and performance styles.

#### Unit 2 – Australian Identity

In this unit students study aspects of Australian identity evident in contemporary drama practice. This may also involve exploring the work of selected drama practitioners and associated performance styles. This unit focuses on the use and documentation of the processes involved in constructing a devised solo or ensemble performance. Students create, present and analyse a performance based on a person, an event, an issue, a place, an artwork, a text and/or an icon from a contemporary or historical Australian context.

In creating the performance, students use stimulus material that allows them to explore an aspect or aspects of Australian identity. They examine selected performance styles and explore the associated conventions. Students further develop their knowledge of the conventions of transformation of character, time and place, the application of symbol, and how these conventions may be manipulated to create meaning in performance and the use of dramatic elements and production areas.

Students analyse their own performance work as well as undertaking an analysis of a performance of an Australian work, where possible, by professional actors.

#### Units 3 – Devised Ensemble Performance

In this unit students explore the work of drama practitioners and draw on contemporary practice as they devise ensemble performance work. Students explore performance styles and associated conventions from a diverse range of contemporary and/or traditional contexts. They work collaboratively to devise, develop and present an ensemble performance. Students create work that reflects a specific performance style or one that draws on multiple performance styles and is therefore eclectic in nature. They use play-making techniques to extract dramatic potential from stimulus material, then apply and manipulate conventions, dramatic elements, expressive skills, performance skills and production areas. Throughout development of the work they experiment with transformation of character, time and place, and application of symbol. Students devise and shape their work to communicate meaning or to have a specific impact on their audience. In addition, students document and evaluate stages involved in the creation, development and presentation of the ensemble performance.

Students analyse and evaluate a professional drama performance selected from the prescribed VCE Drama Unit 3 Playlist published annually on the VCAA website.

#### Unit 4 – Devised Solo Performance

This unit focuses on the development and the presentation of devised solo performances. Students explore contemporary practice and works that are eclectic in nature; that is, they draw on a range of performance styles and associated conventions from a diverse range of contemporary and traditional contexts. Students develop skills in extracting dramatic potential from stimulus material and use play-making techniques to develop and present a short solo performance. They experiment with application of symbol and transformation of character, time and place. They apply conventions, dramatic elements, expressive skills, performance skills and performance styles to shape and give meaning to their work. Students further develop and refine these skills as they create a performance in response to a prescribed structure. They consider the use of production areas to enhance their performance and the application of symbol and transformations. Students document and evaluate the stages involved in the creation, development and presentation of their solo performance.

Students are encouraged to attend performances that incorporate a range of performance styles to support their work in this unit.

#### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. Students are expected to attend a minimum of three prescribed performances and two workshops as preparation for practical and written exams.

#### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

#### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Individual school decision on levels of achievement.	School-assessed coursework and two end-of-year examinations.  Unit 3 and 4 school-assessed coursework: 40 % Performance examination: 35 % End-of-year examination: 25 %

For further information please see the VCAA Drama Study Design

Economics examines the role of consumers, businesses, governments and other organisations in the decision making about the allocation of resources, the production of goods and services and the effect that these decisions may have on material and non-material living standards. Developing students' understanding of economics will enable them to appreciate the reasons behind these decisions and the intended and unintended consequences.

#### Structure

The study is made up of four units:

#### Unit 1 - Economic Decision-making

Economics is a dynamic and constantly evolving field of social science, which looks at the way humans behave and the decisions made to meet the needs and wants of society. In this unit students explore their role in the economy, how they interact with businesses, and the role of the government. Students explore fundamental economic concepts, such as resource allocation, and examine basic economic models, including demand and supply models, where consumers and businesses engage in mutually beneficial transactions. They investigate the motivations behind both consumer and business behaviour and examine how individuals might respond to incentives. In addition, students consider the insights of behavioural economics and how those insights contrast with the traditional model of consumer behaviour. Throughout this unit students are encouraged to investigate contemporary examples and case studies to enhance their understanding of economics concepts.

#### Unit 2 – Economic Issues and Living Standards

A core principle of economics is maximising the living standards of society. This is done through economic decisions that optimise the use of resources to produce goods and services that satisfy human needs and wants. Economic activity is therefore a key consideration for economics. Students consider the link between economic activity and economic growth and investigate the importance of economic growth in raising living standards. They evaluate the benefits and costs of continued economic growth and consider the extent to which our current measurements of living standards are adequate. As part of this unit, students undertake an applied economic analysis of two contemporary economics issues from a local, national and international perspective.

#### Unit 3 – Australia's Living Standards

The Australian economy is constantly evolving. The main instrument for allocating resources is the market, but government also plays a significant role in resource allocation. In this unit students investigate the role of the market in allocating resources, develop an understanding of how market systems might result in efficient outcomes but also might fail to maximise society's living standards, and consider contemporary issues to explain the need for, and consequences of, government intervention in markets. Students also develop an understanding of the macroeconomy, and apply theories to explain how changes in aggregate demand and aggregate supply might affect the achievement of domestic macroeconomic goals and living standards. Finally, students investigate the importance of international economic relationships, how economic factors might affect the value of the exchange rate, the terms of trade and Australia's international competitiveness, and the effect of these on Australian living standards.

#### Unit 4 - Managing the Economy

The Australian government and the Reserve Bank of Australia utilise a wide range of policy instruments to achieve domestic macroeconomic goals and positively influence living standards. This unit focuses on the Australian government's use of aggregate demand policies, and the Reserve Bank's use of monetary policy, to stabilise the economy and enhance living standards. Students consider and evaluate the strengths and weaknesses of these policies. Students also consider how the Australian government uses aggregate supply policies to influence economic growth, inflation and employment in a way that improves Australia's living standards over the long term.

# **ECONOMICS**

#### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

#### Assessment – Satisfactory Completion

The award of satisfactory completion for a unit is based on the teacher's decision that the student has demonstrated achievement of the set of outcomes specified for the unit. Demonstration of achievement of outcomes and satisfactory completion of a unit are determined by evidence gained through the assessment of a range of learning activities and tasks.

#### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Procedures for the assessment of levels of achievement in Units 1 and 2 are a matter for school decision.	Unit 3 school-assessed coursework: Unit 4 school-assessed coursework: Units 3 and 4 examination:	25 % 25 % 50 %

For further information please see the VCAA Economics Study Design



# ENGLISH / ENGLISH AS AN ADDITIONAL LANGUAGE

#### Rationale

This study aims to develop competence in the understanding and use of English for a variety of purposes, to meet the demands of post-school employment and further education, and participation in a democratic society and the global community. The study of English and EAL contributes to the development of literate individuals capable of critical and creative thinking, aesthetic appreciation, and creativity. Through engagement with texts drawn from a range of times, cultures, forms and genres, they will become confident, articulate and critically aware communicators and further develop a sense of themselves, their world and their place within it.

#### Structure

#### Unit 1

#### Area of Study 1 - Reading and exploring texts

Students engage in reading and viewing texts with a focus on personal connections with the story. They discuss and clarify the ideas and values presented by authors through their evocations of character, setting and plot, and through investigations of the point of view and/or the voice of the text. They develop and strengthen inferential reading and viewing skills, and consider the ways a text's vocabulary, text structures and language features can create meaning on several levels and in different ways.

#### Area of Study 2 - Crafting texts

Students engage with and develop an understanding of effective and cohesive writing. They apply, extend, and challenge their understanding and use of imaginative, persuasive and informative text through a growing awareness of situated contexts, stated purposes and audience. Students read and engage imaginatively and critically with mentor texts that model effective writing. Students develop an understanding of the diverse ways that vocabulary, text structures, language features and ideas can interweave to craft compelling texts.

#### Unit 2

#### Area of Study 1 - Reading and exploring texts

Students develop their reading and viewing skills, including deepening their capacity for inferential reading and viewing, to further open possible meanings in a text, and to extend their writing in response to text. Students will develop their skills from Unit 1 through an exploration of a different text type from that studied in Unit 1.

#### Area of Study 2 - Exploring argument

Students consider the way arguments are developed and delivered in many forms of media. Students read. view, and listen to a range of texts that attempt to position an intended audience in a particular context. They explore the structure of these texts, including contention, sequence of arguments, use of supporting evidence and persuasive strategies. They closely examine the language and the visuals employed by the author and offer analysis of the intended effect on the audience. Students apply their knowledge of argument to create a point of view text for oral presentation.

#### Unit 3

#### Area of Study 1 - Reading and responding to texts

Students apply reading and viewing strategies to critically engage with a text, considering its dynamics and complexities and reflecting on the motivations of its characters. They analyse the ways authors construct meaning through vocabulary, text structures, language features and conventions, and the presentation of ideas. They explore the historical context, and the social and cultural values of a text, and recognise how these elements influence the way a text is read or viewed, is understood by different audiences, and positions its readers in different ways.

#### Area of Study 2 - Creating texts

Students build on the knowledge and skills developed through Unit 1. They read and engage imaginatively and critically with mentor texts, and effective and cohesive writing within identified contexts. Through close reading, students expand their understanding of the diverse ways that vocabulary, text structures, language features, conventions and ideas can interweave to create compelling texts. They further consider mentor texts through their understanding of the ways that purpose, context (including mode), and specific and situated audiences influence and shape writing.

# ENGLISH / ENGLISH AS AN ADDITIONAL LANGUAGE

#### Unit 4

#### Area of Study 1 - Reading and responding to texts

Students further sharpen their skills of reading and viewing texts, developed in the corresponding area of study in Unit 3. Students consolidate their capacity to critically analyse texts and deepen their understanding of the ideas and values a text can convey. Students apply reading and viewing strategies to engage with a text and discuss and analyse the ways authors construct meaning in a text through the presentation of ideas, concerns and conflicts, and the use of vocabulary, text structures and language features. They explore the explicit and implicit ideas and values presented in a text. They recognise and explain the ways the historical context, and social and cultural values can be understood by different audiences and can position readers in different ways.

#### Area of Study 2 - Analysing argument

In this area of study, students analyse the use of argument and language, and visuals in texts that debate a contemporary and significant national or international issue. They read, view and/or listen to a variety of texts from the media, including print and digital, and audio and audio visual, and develop their understanding of the ways in which arguments and language complement one another to position an intended audience in relation to a selected issue. Students apply their understanding of the use of argument and language to create a point of view text for oral presentation.

#### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

#### Assessment – Satisfactory Completion

Satisfactory Completion Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

#### Levels of Achievement

Units 1 and 2	Units 3 and 4
Individual school decision on levels of achievement.	School-assessed coursework and examinations. Unit 3 school-assessed coursework: 25 % Unit 4 school-assessed coursework: 25 % End-of-year examination: 50 %

For further information please see the VCAA English/EAL Study Design

VCE Environmental Science enables students to explore the interrelationships between Earth's four systems. Students examine how past and current human activities affect the environment and how future challenges can be managed sustainably. In undertaking this study, students gain an understanding of the complexity of environmental decision-making, and how innovative responses to environmental challenges can reduce pressure on Earth's natural resources and ecosystem services.

In VCE Environmental Science, students develop a range of scientific inquiry skills including practical experimentation, research and analytical skills, problem-solving skills including critical and creative thinking, and communication skills. Students pose questions, formulate hypotheses, conduct investigations, and analyse and critically interpret qualitative and quantitative data. They assess the limitations of data, evaluate methodologies and results, justify their conclusions, make recommendations, and communicate their findings. Students investigate and evaluate environment-related issues, alternative proposals and responses to challenges by considering both short- and long-term consequences for the individual, the environment and society.

#### Unit 1 - How are Earth's dynamic systems interconnected to support life?

Earth has been dramatically altered over the past 4.5 billion years by naturally occurring climate swings, volcanic activity, drifting continents, and other transformative processes. Human activities and lifestyles have an impact on and are impacted by, Earth's systems both directly and indirectly, and with both immediate and far-reaching effects.

In this unit students examine the processes and interactions occurring within and between Earth's four interrelated systems - the atmosphere, biosphere, hydrosphere, and lithosphere. They focus on how ecosystem functioning can influence many local, regional, and global environmental conditions such as plant productivity, soil fertility, water quality and air quality. Students explore how changes that have taken place throughout geological and recent history are fundamental to predicting the likely impact of future changes. They consider a variety of influencing factors in achieving a solutions-focused approach to responsible management of challenges related to natural and human-induced environmental change.

A student-adapted or student-designed scientific investigation is undertaken in Area of Study 3. The investigation involves the generation of primary data and is related to ecosystem components, monitoring and/or change. It draws on the key science skills and key knowledge from Area of Study 1 and/or Area of Study 2.

#### Unit 2 – What affects Earth's capacity to sustain life?

A sustainable food and water system with a minimal environmental footprint is necessary to secure the food and water supplies that can meet the demands of current and future populations of Earth's species, including humans. Both natural and human activities can generate pollution that can cause adverse effects across Earth's four interrelated systems - the atmosphere, biosphere, hydrosphere and lithosphere - and consequently affect food and water security. Pollution can make air and water resources hazardous for plants and animals. It can directly harm soil microorganisms and larger soil-dwelling organisms, with consequences for soil biodiversity, as well as impacting on food security by impairing plant function and reducing food yields.

In this unit students consider pollution as well as food and water security as complex and systemic environmental challenges facing current and future generations. They examine the characteristics, impacts, assessment and management of a range of pollutants that are emitted or discharged into Earth's air, soil, water and biological systems, and explore factors that limit and enable the sustainable supply of adequate and affordable food and water.

A student-directed investigation is to be undertaken in Area of Study 3. The investigation explores how science can be applied to address Earth's capacity to sustain life in the context of the management of a selected pollutant and/or the maintenance of food and/or water security.

The investigation draws on the key science skills and key knowledge from Area of Study 1 and/or Area of Study 2.

# ENVIRONMENTAL SCIENCE

#### Unit 3 - How can biodiversity and development be sustained?

In this unit students focus on environmental management through the application of sustainability principles. They explore the value of the biosphere to all living things by examining the concept of biodiversity and the ecosystem services important for human health and well-being. They analyse the processes that threaten biodiversity and evaluate biodiversity management strategies for a selected threatened endemic animal or plant species. Students use a selected environmental science case study with reference to sustainability principles and environmental management strategies to explore management from an Earth systems perspective, including impacts on the atmosphere, biosphere, hydrosphere and lithosphere.

A student-designed scientific investigation involving the generation of primary data related to biodiversity, environmental management, climate change and/or energy use is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The design, analysis and findings of the investigation are presented in a scientific poster format.

# Unit 4 – How can climate change and the impacts of human energy use be managed?

In this unit students explore different factors that contribute to the variability of Earth's climate and that can affect living things, human society and the environment at local, regional and global scales. Students compare sources, availability, reliability and efficiencies of renewable and non-renewable energy resources in order to evaluate the suitability and consequences of their use in terms of upholding sustainability principles. They analyse various factors that are involved in responsible environmental decision-making and consider how science can be used to inform the management of climate change and the impacts of energy production and use.

Measurement of environmental indicators often involves uncertainty. Students develop skills in data interpretation, extrapolation and interpolation and test predictions. They recognise the limitations of contradictory, provisional and incomplete data derived from observations and models. They explore relationships and patterns in data, and make judgments about accuracy and validity of evidence.

A student-designed scientific investigation involving the generation of primary data related to biodiversity, environmental management, climate change and/or energy use is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The design, analysis and findings of the investigation are presented in a scientific poster format.

#### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 and Unit 4 as a sequence.

#### **Assessment**

Satisfactory Completion Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

#### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Individual school decision on levels of achievement.	School-assessed coursework, school-assessed task and an end-of-year examination.  Unit 3 school-assessed coursework: 20%  Unit 4 school-assessed coursework: 30%  Units 3 and 4 examination 50%

VCE Extended Investigation enables students to identify a research question and carry out an independent research project designed to answer it.

Students develop and apply critical thinking skills, with an emphasis on learning to think as a researcher. They recognise what constitutes a good research question and develop an ethical, disciplined and reasoned approach to gathering and interpreting data. They learn to analyse and evaluate the arguments presented by other researchers as they conduct a review of the academic literature relevant to their research question.

Students learn and apply project management skills to ensure completion of their research within the limits of the time and resources available, and document their progress and sources. Having completed their investigations, students prepare a substantial written report on their research and its outcomes. Students also deliver an oral presentation on their investigation to an educated, non-specialist audience, explaining, critically evaluating and justifying their research choices and conclusions.

#### Structure

The study is comprised of a Unit 3 and 4 sequence. The Year 11 course is offered as introductory units and are not accredited VCE Units.

#### Year 11 Introduction to Extended Investigation

This subject runs for the full year and is designed to prepare students for VCE Extended investigation (Unit 3 and 4). Students develop an understanding of the research process and are able to recognise, and develop a good research question. Students develop their critical thinking skills by learning to analyse the arguments of others and evaluating their own arguments. Students apply project management skills to undertake an independent inquiry and document their research process in an Extended Investigation Journal. Students report on, and evaluate their findings. They present their research in the form of a written report and oral presentation.

Given the focus on academic reading and writing, this subject is well suited to students with a 'B' grade average or higher in English.

#### Unit 3 – Designing and Conducting Research

In this unit, students develop and practise critical thinking skills. Students learn to evaluate the arguments of others and apply the same critical approach to their own developing ideas.

As they consider possible questions for investigation, students explore the scope, nature and purpose of research, the value of various research methods and the principles of ethical conduct. They conduct a review of relevant research literature and identify a specific question. They identify appropriate sources of data and methods of data collection.

Students begin to undertake their investigation, conducting initial research and refining their understanding of likely challenges in managing their project to a conclusion.

Throughout the unit, students use an Extended Investigation Journal to complete exercises in thinking critically, and to document their research process. They learn and apply the skills of project management, tracking their progress towards key milestones.

#### Unit 4 – Completing and Reporting Research

In this unit, students further develop their thinking skills by interpreting, analysing and evaluating arguments. They apply these skills to the research reported by others and to the conduct of their own investigation and the presentation of its outcomes.

Students prepare a substantial written report that presents the details of their investigation and its methods and findings in response to the research question. Their report includes critical evaluation of the investigation, the research methods used and the quality and range of evidence gathered. They adhere to the conventions of academic writing.

Students prepare and deliver an oral presentation that explains their investigation and its findings to an educated, non-specialist audience. The Extended Investigation Journal continues to be used to record the research process.

#### Assessment

The student's level of achievement in Units 3 and 4 will be determined by School-assessed Coursework (SAC), a Critical Thinking Test and an Externally-assessed Task, as specified in the VCE study design.

#### Levels of Achievement

Unit 3		Unit 4	
School-assessed Coursework:	30 %	Externally-assessed Task: Critical Thinking Test:	60 % 10 %

For further information please see the VCAA Extended Investigation Study Design

Australia has a varied and abundant food supply. Globally, many people do not have access to a secure and varied food supply and many Australians, amid a variety of influences, consume food and beverage products in quantities that may harm their health. Also, food and cooking, and their central roles in our lives, have become prominent topics in digital media and publishing. This study examines the various factors for this increased exposure and the background to this abundance of food, and it explores reasons for our food choices.

VCE Food Studies is designed to build the capacities of students to make informed food choices and develop an understanding about food security, food sovereignty and food citizenship. Students develop their understanding of food while acquiring skills that enable them to take greater ownership of their food decisions and eating patterns. This study complements and supports further training and employment opportunities in the fields of home economics, food technology, food manufacturing and hospitality.

#### Unit 1 – Food origins

In this unit students focus on food from historical and cultural perspectives, and investigate the origins and roles of food through time and across the world. In Area of Study 1 students explore how humans have historically sourced their food, examining the general progression from hunter-gatherer to rural-based agriculture, to today's urban living and global trade in food. Students consider the origins and significance of food through inquiry into one particular food-producing region of the world.

In Area of Study 2 students focus on Australia. They look at Australian indigenous food prior to European settlement and how food patterns have changed since, particularly through the influence of food production, processing and manufacturing industries and immigration. Students investigate cuisines that are part of Australia's culinary identity today and reflect on the concept of an Australian cuisine.

Students consider the influence of innovations, technologies and globalisation on food patterns. Throughout this unit they complete topical and contemporary practical activities to enhance, demonstrate and share their learning with others.

#### Unit 2 - Food makers

In this unit students investigate food systems in contemporary Australia. Area of Study 1 focuses on commercial food production industries, while Area of Study 2 looks at food production in domestic and small-scale settings, as both a comparison and complement to commercial production. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers.

Students use practical skills and knowledge to produce foods and consider a range of evaluation measures to compare their foods to commercial products. In demonstrating their practical skills, students design new food products and adapt recipes to suit particular needs and circumstances.

#### Unit 3 – Food in daily life

In this unit students investigate the many roles and everyday influences of food. Area of Study 1 explores the science of food: our physical need for it and how it nourishes and sometimes harms our bodies. Students investigate the science of food appreciation, the physiology of eating and digestion, and the role of diet on gut health. They analyse the scientific evidence, including nutritional rationale, behind the healthy eating recommendations of the Australian Dietary Guidelines and the Australian Guide to Healthy Eating (see www.eatforhealth.gov.au), and develop their understanding of diverse nutrient requirements.

Area of Study 2 focuses on influences on food choices: how communities, families and individuals change their eating patterns over time and how our food values and behaviours develop within social environments. Students inquire into the role of food in shaping and expressing identity and connectedness, and the ways in which food information can be filtered and manipulated. They investigate behavioural principles that assist in the establishment of lifelong, healthy dietary patterns.

Practical activities enable students to understand how to plan and prepare food to cater for various dietary needs through the production of everyday food that facilitates the establishment of nutritious and sustainable meal patterns.

#### Unit 4 – Food issues, challenges and futures

In this unit students examine debates about Australia's food systems as part of the global food systems and describe key issues relating to the challenge of adequately feeding a rising world population.

In Area of Study 1 students focus on individual responses to food information and misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices. They also consider the relationship between food security, food sovereignty and food citizenship. Students consider

how to assess information and draw evidence-based conclusions, and apply this methodology to navigate contemporary food fads, trends and diets. They practise and improve their food selection skills by interpreting food labels and analysing the marketing terms used on food packaging.

In Area of Study 2 students focus on issues about the environment, climate, ecology, ethics, farming practices, including the use and management of water and land, the development and application of innovations and technologies, and the challenges of food security, food sovereignty, food safety and food wastage. They research a selected topic, seeking clarity on current situations and points of view, considering solutions and analysing work undertaken to solve problems and support sustainable futures. The focus of this unit is on food issues, challenges and futures in Australia.

Practical activities provide students with opportunities to apply their responses to environmental and ethical food issues, reflect on healthy eating recommendations of the Australian Dietary Guidelines and the Australian Guide to Healthy Eating, and consider how food selections and food choices can optimise human and planetary health.

#### Entry

There are no prerequisites for Units 1, 2 and 3. Unit 3 must be undertaken prior to studying Unit 4.

#### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

#### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	School-assessed coursework, school-assend an end-of-year examination. Unit 3 school-assessed coursework: Unit 4 school-assessed coursework: Units 3 and 4 examination	30% 30% 40%

Please note: The fees outlined for these units of study covers the cost of the ingredients used by individual students in class. If the fee is not paid, students will be expected to supply their own ingredients (\$100 per Semester).

For further information please see the VCAA Food Studies Study Design



This study focuses on the geography of place and change. Geographers investigate the changing patterns of place using a range of geographical resources and skills. They observe, describe, explain and analyse patterns of phenomena which affect places at or near the surface of the Earth.

### Structure

The study is made up of four units.

### Unit 1 – Hazards and Disasters

In this unit students undertake an overview of hazards before investigating two contrasting types of hazards and the responses to them by people. Hazards represent the potential to cause harm to people and or the environment whereas disasters are judgments about the impacts of hazard events. Hazards include a wide range of situations including those within local areas, such as fast moving traffic or the likelihood of coastal erosion, to regional and global hazards such as drought and infectious disease. Students examine the processes involved with hazards and hazard events, including their causes and impacts, human responses to hazard events and interconnections between human activities and natural phenomena. This unit investigates how people have responded to specific types of hazards, including attempts to reduce vulnerability to, and the impact of, hazard events.

### Unit 2 – Impact of Tourism: Issues and Challenges

In this unit students investigate the characteristics of tourism, with particular emphasis on where it has developed, its various forms, how it has changed and continues to change and its impacts on people, places and environments. They select contrasting examples of tourism from within Australia and elsewhere in the world to support their investigations.

The study of tourism at local, regional and global scales emphasises the interconnection within and between places. For example, the interconnections of climate, landforms and culture help determine the characteristics of a place that can prove attractive to tourists. There is an interconnection between places tourists originate from and their destinations through the development of communication and transport infrastructure, employment, together with cultural preservation and acculturation. The growth of tourism at all scales requires careful management to ensure environmentally sustainable and economically viable tourism.

### Unit 3 - Changing the Land

This unit focuses on two investigations of geographical change: change to land cover and change to land use. Land cover includes biomes such as forest, grassland, tundra and wetlands, as well as land covered by ice and water. Land cover is the natural state of the biophysical environment developed over time as a result of the interconnection between climate, soils, landforms and flora and fauna and, increasingly, interconnections with human activity. Natural land cover has been altered by many processes such as geomorphological events, plant succession and climate change. People have modified land cover to produce a range of land uses to satisfy needs such as housing, resource provision, communication, recreation and so on.

### Unit 4 – Human Population – Trends and Issues

In this unit students investigate the geography of human populations. They explore the patterns of population change, movement and distribution, and how governments, organisations and individuals have responded to those changes in different parts of the world. In this unit, students study population dynamics before undertaking an investigation into two significant population trends arising in different parts of the world. They examine the dynamics of populations and their economic, social, political and environmental impacts on people and places.

### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

There is a compulsory fieldwork component in Units 1, 2 and 3.

### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Individual school decision on levels of achievement.	School-assessed coursework and examinations Unit 3 school-assessed coursework: 25 % Unit 4 school-assessed coursework: 25 % Units 3 and 4 examination: 50 %

For further information please see the VCAA Geography Study Design



## HEALTH AND HUMAN DEVELOPMENT

### Rationale

VCE Health and Human Development provides students with broad understandings of health and wellbeing that reach far beyond the individual. Students learn how important health and wellbeing is to themselves and to families, communities, nations and global society. Students explore the complex interplay of biological, sociocultural and environmental factors that support and improve health and wellbeing and those that put it at risk. The study provides opportunities for students to view health and wellbeing, and development, holistically - across the lifespan and the globe, and through a lens of social equity and justice.

VCE Health and Human Development is designed to foster health literacy. As individuals and as citizens, students develop their ability to navigate information, to recognise and enact supportive behaviours, and to evaluate healthcare initiatives and interventions. Students take this capacity with them as they leave school and apply their learning in positive and resilient ways through future changes and challenges.

VCE Health and Human Development offers students a range of pathways including further formal study in areas such as health promotion, community health research and policy development, humanitarian aid work, allied health practices, education, and the health profession.

### Structure

The study is made up of four units.

### Unit 1 – Understanding Health and Wellbeing

This unit looks at health and wellbeing as a concept with varied and evolving perspectives and definitions. It takes the view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. As a foundation to the understanding of health, students should investigate the World Health Organization's (WHO) definition and also explore other interpretations. Wellbeing is a complex combination of all dimensions of health, characterised by an equilibrium in which the individual feels happy, healthy, capable and engaged. For the purposes of this study, students should consider wellbeing to be an implicit element of health.

In this unit students identify personal perspectives and priorities relating to health and wellbeing, and enquire into factors that influence health attitudes, beliefs and practices, including among Aboriginal and Torres Strait Islanders. Students look at multiple dimensions of health and wellbeing, the complex interplay of influences on health and wellbeing and the indicators used to measure and evaluate health status. With a focus on youth, students consider their own health as individuals and as a cohort. They build health literacy through interpreting and using data, through investigating the role of food, and through extended inquiry into one youth health focus area.

### Unit 2 - Managing Health and Development

This unit investigates transitions in health and wellbeing, and development, from lifespan and societal perspectives. Students look at changes and expectations that are part of the progression from youth to adulthood. This unit promotes the application of health literacy skills through an examination of adulthood as a time of increasing independence and responsibility, involving the establishment of long-term relationships, possible considerations of parenthood and management of health-related milestones and changes.

Students enquire into the Australian healthcare system and extend their capacity to access and analyse health information. They investigate the challenges and opportunities presented by digital media and health technologies, and consider issues surrounding the use of health data and access to quality health care.

### Unit 3 – Australia's Health in a Globalised World

In this unit, students look at health and wellbeing, disease and illness as being multidimensional, dynamic and subject to different interpretations and contexts. They explore health and wellbeing as a global concept and take a broader approach to inquiry. Students consider the benefits of optimal health and wellbeing and its importance as an individual and a collective resource. They extend this to health as a universal right, analysing and evaluating variations in the health status of Australians.

Students focus on health promotion and improvements in population health over time. Through researching health improvements and evaluating successful programs, they explore various public health approaches and the interdependence of different models. While the emphasis is on the Australian health system, the progression of change in public health approaches should be seen within a global context.

## HEALTH AND HUMAN DEVELOPMENT CONTINUED ...

### Area of Study 1 – Understanding Health and Wellbeing

In this area of study, students explore health and wellbeing, and illness as complex, dynamic and subjective concepts. They reflect on both the universality of public health goals and the increasing influence of global conditions on Australians. Students develop their understanding of the indicators used to measure and evaluate health status, and the factors that contribute to variations in health status between different groups.

### Outcome 1

On completion of this unit, the student should be able to explain the complex, dynamic and global nature of health and wellbeing, interpret and apply Australia's health status data, and analyse variations in health status.

To achieve this outcome, the student will draw on the key knowledge and key skills outlined in Area of Study 1

### Area of Study 2 - Promoting health in Australia

In this area of study, students look at different approaches to public health over time, with an emphasis on changes and strategies that have succeeded in improving health outcomes. They examine the progression of public health in Australia since 1900, noting global changes and influences such as the Ottawa Charter for Health Promotion, and the general transition of focus from the health and wellbeing of individuals to that of population groups including Aboriginal and Torres Strait Islander Peoples. Students investigate the Australian health system and its role in promoting health and wellbeing. They apply their understanding of successful health promotion campaigns, programs and case studies to evaluate the ability of initiatives to identify priorities and improve health outcomes in Australia.

### Outcome 2

On completion of this unit, the student should be able to explain changes to public health approaches, analyse improvements in population health over time and evaluate health promotion strategies and initiatives.

To achieve this outcome, the student will draw on the key knowledge and key skills outlined in Area of Study 2.

### Unit 4 – Health and Human Development in a Global Context

In this unit, students examine health and human development in a global context. They use data to investigate health status and human development in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. Students build their understanding of health in a global context through examining changes in health status over time and studying the key concept of sustainability. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade, tourism, conflict and the mass movement of people.

Students consider global action to improve health and human development, focusing on the United Nations' (UN's) Sustainable Development Goals (SDGs) and the priorities of the World Health Organization (WHO). They also investigate the role of non-government organisations and Australia's overseas aid program. Students evaluate the effectiveness of health initiatives and programs in a global context and reflect on their own capacity to act.

### Area of Study 1 - Global Health and Human development

In this area of study, students explore similarities and differences in health status and human development in low-, middle- and high-income countries, including Australia. They investigate a range of factors that contribute to health inequalities and study the concepts of sustainability and the Human Development Index to further their understanding of health and human development in a global context. Students inquire into the effects of global trends on health and human development.

### Outcome 1

On completion of this unit, the student should be able to analyse similarities and differences in health status and human development globally and analyse the factors that contribute to these differences.

To achieve this outcome, the student will draw on the key knowledge and key skills outlined in Area of Study 1.

### Area of Study 2 – Health and the Sustainable Development Goals

In this area of study, students look at action for promoting health globally. They consider the importance of and relationships between the UN's SDGs, focusing on their promotion of health and human development. Students investigate the priorities of the WHO and evaluate Australia's aid program and the role of non-government organisations. They reflect on meaningful and achievable individual and social actions that could contribute to the work of national and international organisations that promote health and wellbeing.

### Outcome 2

On completion of this unit, the student should be able to analyse the relationships between the SDGs and their role in the promotion of health and human development and evaluate the effectiveness of global aid programs.

To achieve this outcome, the student will draw on the key knowledge and key skills outlined in Area of Study 2.

### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	School-assessed coursework and an end examination.	-of-year
	Unit 3 school-assessed coursework:	25 %
	Unit 4 school-assessed coursework:	25 %
	Units 3 and 4 end of year examination:	50 %

For further information please see the VCAA Health and Human Development Study Design

History is the practice of understanding and making meaning of the past. Students learn about their historical past, their shared history and the people, ideas and events that have created present societies. It builds a conceptual and historical framework within which students can develop an understanding of the issues of their own time and place. It develops the skills necessary to analyse visual, oral and written records. The study of history draws links between the social/political institutions and language of contemporary society and its history. It sets accounts of the past within the framework of the values and interests of that time.

### Structure

The study is made up of four units

### Unit 1 - Change and conflict

In this unit students investigate the nature of social, political, economic and cultural change in the later part of the 19th century and the first half of the 20th century. Modern History provides students with an opportunity to explore the significant events, ideas, individuals and movements that shaped the social, political, economic and technological conditions and developments that have defined the modern world.

### Unit 2 - The changing world order

In this unit students investigate the nature and impact of the Cold War and challenges and changes to social, political and economic structures and systems of power in the second half of the twentieth century and the first decade of the twenty-first century.

### Units 3 and 4 - Year 12 History

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point in the collapse and destruction of an existing political order which results in extensive change to society.

The Revolutions studied are France and Russia.

### **Entry**

There are no prerequisites for entry to Unit 3. Students must undertake Unit 3 prior to undertaking Unit 4.

### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	School-assessed coursework and an end examination.	,
	Unit 3 school-assessed coursework:	25 %
	Unit 4 school-assessed coursework:	25 %
	Units 3 and 4 examination:	50 %

For further information please see the VCAA History Study Design

In contemporary Australian society there is a range of complex laws that exist to protect the rights of individuals and to achieve social cohesion. These laws are made by bodies such as parliament and the courts and are upheld by a number of institutions and processes within the legal system. Members of society interact with the laws and the legal system in many aspects of their lives and can influence law makers.

The study of VCE Legal Studies enables students to become active and informed citizens by providing them with valuable insights into their relationship with the law and the legal system. They develop knowledge and skills that enhance their confidence and ability to access and participate in the legal system. Students come to appreciate how legal systems and processes aim to achieve social cohesion, and how they themselves can create positive changes to laws and the legal system. VCE Legal Studies equips students with the ability to research and analyse legal information and apply legal reasoning and decision-making skills, and fosters critical thinking to solve legal problems. Further study in the legal field can lead to a broad range of career opportunities such as lawyer, paralegal, legal secretary and careers in the courtroom.

### Structure

This study is made up of four units.

### Unit 1 – The Presumption of Innocence

Laws, including criminal law, aim to achieve social cohesion and protect the rights of individuals. Criminal law is aimed at maintaining social order. When a criminal law is broken, a crime is committed which is punishable and can result in criminal charges and sanctions. In this unit, students develop an understanding of legal foundations, such as the different types and sources of law, the characteristics of an effective law, and an overview of parliament and the courts. Students investigate key concepts of criminal law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime. In doing this, students develop an appreciation of the manner in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused. Students also develop an appreciation of how a criminal case is determined, and the types and purposes of sanctions.

### Unit 2 - Wrongs and Rights

Civil law aims to protect the rights of individuals. When rights are infringed, a dispute may arise requiring resolution, and remedies may be awarded. In this unit, students investigate key concepts of civil law and apply these to actual and/or hypothetical scenarios to determine whether a party is liable in a civil dispute. Students explore different areas of civil law, and the methods and institutions that may be used to resolve a civil dispute and provide remedies. Students also develop an understanding of how human rights are protected in Australia and possible reforms to the protection of rights, and investigate a contemporary human rights issue in Australia, with a specific focus on one case study.

## Unit 3 - Rights and Justice

The Victorian justice system, which includes the criminal and civil justice systems, aims to protect the rights of individuals and uphold the principles of justice: fairness, equality and access. In this unit, students examine the methods and institutions in the justice system, and consider their appropriateness in determining criminal cases and resolving civil disputes. Students consider the Magistrates' Court, County Court and Supreme Court within the Victorian court hierarchy, as well as other means and institutions used to determine and resolve cases. Students explore topics such as the rights available to an accused and to victims in the criminal justice system, the roles of the judge, jury, legal practitioners and the parties, and the ability of sanctions and remedies to achieve their purposes. Students investigate the extent to which the principles of justice are upheld in the justice system. Throughout this unit, students apply legal reasoning and information to actual and/or hypothetical scenarios.

### Unit 4 – The People, the Law and Reform

The study of Australia's laws and legal system involves an understanding of institutions that make and reform our laws. In this unit, students explore how the Australian Constitution establishes the law-making powers of the Commonwealth and state parliaments, and how it protects the Australian people through structures that act as a check on parliament in law-making. Students develop an understanding of the significance of the High Court in protecting and interpreting the Australian Constitution. They investigate parliament and the courts, and the relationship between the two in law-making, and consider the roles of the individual, the media and law reform bodies in influencing changes to the law, and past and future constitutional reform. Throughout this unit, students apply legal reasoning and information to actual and/or hypothetical scenarios.

### Entry

There are no prerequisites for entry to Unit 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

### Assessment - Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Individual school decision on levels of achievement.	School-assessed coursework and an end-of-year exam Unit 3 school-assessed coursework: 25 % Unit 4 school-assessed coursework: 25 % Units 3 and 4 examination: 50 %

For further information please see the VCAA Legal Studies Study Design

Literature involves the study and enjoyment of a wide range of literary texts - classical, popular, traditional and modern. Its distinctive focus is on the use of language to illuminate and give insight into the nature of experience. Literature is an interactive study between the text, the social, political and economic context in which the text was produced, and the experience of life and of literature that the reader brings to the text.

### Structure

The study is made up of 4 units.

### Unit 1

## Area of Study 1 - Reading Practices

Students consider how language, structure and stylistic choices are used in different literary forms. They reflect on the contribution of form and style to meaning, and the degree to which points of view, experiences and contexts shape their own and others' interpretations of text. They begin to identify and explore textual details, including language and features, to develop a close analysis response to a text.

### Area of Study 2 - Exploration of Literary Movements and Genres

Students explore the concerns, ideas, style and conventions common to a distinctive type of literature seen in literary movements or genres and apply this to specific texts. They engage with the ideas and concerns shared by the texts through varied features, and they experiment with the assumptions and representations embedded in the texts.

### Unit 2

### Area of Study 1 - Voices of Country

Students explore and examine representations of and voices, perspectives and knowledge of Aboriginal and Torres Strait Islander authors and creators. They consider the interconnectedness of place, culture and identity through the experiences, texts and voices, including connections to Country, the impact of colonisation and its ongoing consequences, and issues of reconciliation and reclamation. They explore and challenge assumptions and stereotypes arising from colonisation. Students acknowledge and reflect on a range of Australian views and values (including their own) through texts and consider stories about the Australian landscape and culture

### Area of Study 2 - The Text in its Context

Students focus on the text and its varied contexts. They reflect on representations of a specific time period and/or culture within a text. Students explore the text to understand its point of view and what it reflects or comments on. They identify the language and the representations in the text that reflect the specific time period and/or culture, its ideas and concepts. Students develop the ability to analyse language closely, recognising that words have historical and cultural import.

### Unit 3

### Area of Study 1 - Adaptations and Transformations

Students focus on how the form of a text contributes to its meaning. They explore the form of a set text by constructing a close analysis of that text. They then reflect on the extent to which adapting the text to a different form, and often in a new or reimagined context, affects its meaning, comparing the original with the adaptation.

### Area of Study 2 - Developing Interpretations

Students explore the different ways we can read and understand a text by developing, considering, and comparing interpretations of a set text.

They first develop their own interpretations of a set text, analysing varied contexts, how ideas, views and values are presented in a text, and the ways these are endorsed, challenged and/or marginalised through literary forms, features and language.

Students explore supplementary readings that can enrich, challenge and/or contest the ideas and the views, values and assumptions of the set text. They then develop a second interpretation of the same text, reflecting an enhanced appreciation and understanding of the text.

### Unit 4

### Area of Study 1 - Creative Responses to Texts

Students focus on the techniques used for creating and recreating a literary work. They use knowledge of how the meaning of texts can change as context and form change to construct their own creative transformations of texts. They learn how authors develop representations of people and places, and they develop an understanding of varied features. Students draw inferences from the original text to create their own writing. In their adaptation of the tone and the style of the original text, students develop an understanding of the views and values explored. They reflect critically on their own response, the literary form, features and language of a text

### Area of Study 2 - Close Analysis of Texts

Students focus on a detailed scrutiny of the language, style, concerns and construction of texts. They attend closely to textual details to examine the ways specific passages in a text contribute to their overall understanding of the whole text. Students consider literary forms, features and language, and the views and values of the text. They write expressively to develop a close analysis, using detailed references to the text.

### Entry

There is no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4

### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	School assessed coursework and an end examination Unit 3 school-assessed coursework: Unit 4 school-assessed coursework: Units 3 and 4 examination:	25 % 25 % 25 % 50 %

For further information please see the VCAA Literature Study Design

## FOUNDATION MATHEMATICS

### Rationale

Foundation Mathematics focuses on providing students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning, community, and global settings relevant to contemporary society.

Foundation mathematics is the most accessible level of mathematics offered at the VCE level. However, it is still a rigorous mathematics subject that will have similar homework requirements to the other mathematics subjects offered at VUSC.

If you are considering studying at university Foundation mathematics meets the requirements for "any mathematics". You should carefully check the course entry requirements of your preferred courses.

This subject meets the requirements of many courses that require "any mathematics". Foundation Mathematics may not be suitable if you intend to undertake tertiary study in the STEM fields (Science, Technology, Engineering and Mathematics). Consider taking Mathematical Methods or General Mathematics if you intend to undertake further study in these areas.

Note: Units 3 & 4 will not be offered in 2025. It will be offered in 2026.

### Unit 1

Foundation Mathematics Units 1 and 2 focus on providing students with the mathematical knowledge, skills, understanding and dispositions to solve problems in real contexts for a range of workplace, personal, further learning, and community settings relevant to contemporary society. They are also designed as preparation for Foundation Mathematics Units 3 and 4 and contain assumed knowledge and skills for these units.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving integer, rational and real arithmetic, sets, lists and tables, contemporary data displays, diagrams, plans, geometric objects and constructions, algorithms, measures, equations and graphs, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic, statistical and financial functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Area of Study 1 – Algebra, number and structure

Area of Study 2 – Data analysis, probability and statistics

Area of Study 3 – Discrete Mathematics (Financial and consumer mathematics)

Area of Study 4 - Space and measurement

### Unit 2

The focus of Unit 2 is on extending breadth and depth in the application of mathematics to solving practical problems from contexts present in students' other studies, work and personal or other familiar situations. The areas of study for Foundation Mathematics Unit 2 are 'Algebra, number and structure', 'Data analysis, probability and statistics', 'Discrete mathematics', and 'Space and measurement'.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving integer, rational and real arithmetic, sets, lists and tables, contemporary data displays, diagrams, plans, geometric objects and constructions, algorithms, measures, equations and graphs, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic, statistical and financial functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Area of Study 1 – Algebra, number and structure

Area of Study 2 – Data analysis, probability and statistics

Area of Study 3 – Discrete Mathematics (Financial and consumer mathematics)

Area of Study 4 - Space and measurement

### Units 3 and 4

Assumed knowledge and skills for Foundation Mathematics Units 3 and 4 are contained in Foundation Mathematics Units 1 and 2, and will be drawn on, as applicable, in the development of related content from the areas of study, and key knowledge and key skills for the outcomes.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, contemporary data displays, diagrams, plans, geometric objects and constructions, algebra, algorithms, measures, equations and graphs, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Area of Study 1 – Algebra, number and structure

Area of Study 2 – Data analysis, probability and statistics

Area of Study 3 – Discrete Mathematics (Financial and consumer mathematics)

Area of Study 4 – Space and measurement

There are no prerequisites for entry to Unit 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Procedures for the assessment of levels of achievement in Units 1 and 2 are a matter for school	School-assessed coursework and two end of year examinations as follows:
decision.	General Maths Unit 3 school-assessed course work: 40% Unit 4 school-assessed course work: 20 % Unit 3 & 4 Examination: 40 %

General Mathematics focuses on real-life application of mathematics and caters for a range of student interests.

### Unit 1

General Mathematics Units 1 and 2 cater for a range of student interests, provide preparation for the study of VCE General Mathematics at the Units 3 and 4 level and contain assumed knowledge and skills for these units. The areas of study for Unit 1 of General Mathematics are 'Data analysis, probability and statistics', 'Algebra, number and structure', 'Functions, relations and graphs' and 'Discrete mathematics'.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists, tables and matrices, diagrams and geometric constructions, algorithms, algebraic manipulation, recurrence relations, equations and graphs, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic, financial and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Area of Study 1 – Data analysis, probability and statistics

Area of Study 2 – Algebra, number and structure

Area of Study 3 - Functions, relationships and graphs

Area of Study 4 – Discrete mathematics

### Unit 2

General Mathematics Units 1 and 2 cater for a range of student interests, provide preparation for the study of VCE General Mathematics at the Units 3 and 4 level and contain assumed knowledge and skills for these units. The areas of study for Unit 2 of General Mathematics are 'Data analysis, probability and statistics', 'Discrete mathematics', 'Functions, relations and graphs' and 'Space and measurement'.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams, networks and geometric constructions, algorithms, algebraic manipulation, equations and graphs, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic, financial and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Area of Study 1 - Data analysis, probability and statistics

Area of Study 2 - Discrete mathematics

Area of Study 3 - Functions, relations and graphs

Area of Study 4 - Space and measurement.

### Units 3 and 4

General Mathematics Units 3 and 4 focus on real-life application of mathematics and consist of the areas of study 'Data analysis, probability and statistics' and 'Discrete mathematics'.

Unit 3 comprises Data analysis and Recursion and financial modelling, and Unit 4 comprises Matrices and Networks and decision mathematics.

Assumed knowledge and skills for General Mathematics Units 3 and 4 are contained in General Mathematics Units 1 and 2, and will be drawn on, as applicable, in the development of related content from the areas of study, and key knowledge and key skills for the outcomes of General Mathematics Units 3 and 4.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists, tables and matrices, diagrams, networks, algorithms, algebraic manipulation, recurrence relations, equations and graphs. They should have facility with relevant mental and byhand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic statistical and financial functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

### Area of Study 1 - Data analysis, probability and statistics

### Area of Study 2 - Discrete mathematics

There are no prerequisites for entry to Units 1,2 and 3. However students are strongly encouraged to have satisfactorily completed Year 10 General Mathematics or Year 10 Mathematical Methods for entry to Unit 1 and to have successfully completed Units 1 and 2 for entry to Unit 3. Students must undertake Unit 3 prior to undertaking Unit 4.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Procedures for the assessment of levels of achievement in Units 1 and 2 are a matter for school	School-assessed coursework and two ene examinations as follows:	d of year
decision.	General Maths Unit 3 school-assessed course work: Unit 4 school-assessed course work: Exam 1 Multiple choice (technology active): Exam 2 Short answer (technology active):	24 % 16 % 30 % 30 %

For further information please see the following VCE Study Designs:

**General Mathematics** (outline of all mathematics units offered)

Mathematical Methods Units 1 and 2 provide an introductory study of simple elementary functions of a single real variable, algebra, calculus, probability and statistics and their applications in a variety of practical and theoretical contexts. They are designed as preparation for Mathematical Methods Units 3 and 4 and contain assumed knowledge and skills for these units. The focus of Unit 1 is the study of simple algebraic functions, and the areas of study are 'Functions and graphs', 'Algebra', 'Calculus' and 'Probability and statistics'. At the end of Unit 1, students are expected to have covered the content outlined in each area of study, with the exception of 'Algebra' which extends across Units 1 and 2. This content should be presented so that there is a balanced and progressive development of skills and knowledge from each of the four areas of study with connections between and across the areas of study being developed consistently throughout both Units 1 and 2.

### Unit 1

Mathematical Methods Units 1 and 2 provide an introductory study of simple elementary functions of a single real variable, algebra, calculus, probability and statistics and their applications in a variety of practical and theoretical contexts. The units are designed as preparation for Mathematical Methods Units 3 and 4 and contain assumed knowledge and skills for these units.

The focus of Unit 1 is the study of simple algebraic functions, and the areas of study are 'Functions, relations and graphs', 'Algebra, number and structure', 'Calculus' and 'Data analysis, probability and statistics'. At the end of Unit 1, students are expected to have covered the content outlined in each area of study, with the exception of 'Algebra, number and structure' which extends across Units 1 and 2. This content should be presented so that there is a balanced and progressive development of skills and knowledge from each of the four areas of study with connections between and across the areas of study being developed consistently throughout both Units 1 and 2.

In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algorithms, algebraic manipulation, equations, graphs and differentiation, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the unit as applicable.

Area of Study 1 - Functions, relations and graphs

Area of Study 2 - Algebra, number and structure

Area of Study 3 - Calculus

Area of Study 4 - Data analysis, probability and statistics

### Unit 2

The focus of Unit 2 is the study of simple transcendental functions, the calculus of polynomial functions and related modelling applications. The areas of study are 'Functions, relations and graphs', 'Algebra, number and structure', 'Calculus' and 'Data analysis, probability and statistics'. At the end of Unit 2, students are expected to have covered the content outlined in each area of study.

In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algorithms, algebraic manipulation, equations, graphs, differentiation and anti-differentiation, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the unit as applicable.

Area of Study 1 - Functions, relations and graphs

Area of Study 2 - Algebra, number and structure

Area of Study 3 - Calculus

Area of Study 4 - Data analysis, probability and statistics

### Units 3 and 4

Mathematical Methods Units 3 and 4 extend the introductory study of simple elementary functions of a single real variable, to include combinations of these functions, algebra, calculus, probability and statistics, and their applications in a variety of practical and theoretical contexts. Units 3 and 4 consist of the areas of study 'Algebra, number and structure', 'Data analysis, probability and statistics', 'Calculus', and 'Functions, relations and graphs', which must be covered in progression from Unit 3 to Unit 4, with an appropriate selection of content for each of Unit 3 and Unit 4. Assumed knowledge and skills for Mathematical Methods Units 3 and 4 are contained in Mathematical Methods Units 1 and 2, and will be drawn on, as applicable, in the development of related content from the areas of study, and key knowledge and key skills for the outcomes of Mathematical Methods Units 3 and 4.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algorithms, algebraic manipulation, equations, graphs, differentiation, anti-differentiation, integration and inference, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Area of Study 1 - Functions, relations and graphs

Area of Study 2 - Algebra, number and structure

Area of Study 3 - Calculus

Area of Study 4 - Data analysis, probability and statistics

### Entry

Assumed knowledge and skills for Mathematical Methods Units 3 and 4 are contained in Mathematical Methods Units 1 and 2, and will be drawn on, as applicable, in the development of related content from the areas of study, and key knowledge and skills for the outcomes of Mathematical Methods Units 3 and 4.

### Levels of Achievement

The student's level of achievement for Units 3 and 4 will be determined by School-assessed Coursework. School assessed Coursework tasks must be a part of the regular teaching and learning program and must not unduly add to the workload associated with that program. They must be completed mainly in class and within a limited timeframe.

Units 1 and 2	Unit 3 and 4
Individual school decision on levels of achievement.	School-assessed coursework and two end of year examinations as follows:
	Mathematical Methods (CAS)Unit 3 school-assessed course work:20 %Unit 4 school-assessed course work:20 %Exam 1 (technology free):20 %Exam 2 (technology active):40 %

For further information please see the following VCE Study Designs:

**Mathematical Methods** 

## SPECIALIST MATHEMATICS

### Rationale

Specialist Mathematics Units 1 and 2 provide a course of study for students who wish to undertake an in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling, problem-solving, reasoning and proof. This study has a focus on interest in the discipline of mathematics and investigation of a broad range of applications, as well as development of a sound background for further studies in mathematics and mathematics related fields.

Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Units 3 and 4. Study of Specialist Mathematics Units 3 and 4 also assumes concurrent study or previous completion of Mathematical Methods Units 3 and 4.

### Unit 1

Specialist Mathematics Units 1 and 2 provide a course of study for students who wish to undertake an

in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling, problem-solving, reasoning and proof. This study has a focus on interest in the discipline of mathematics and investigation of a broad range of applications, as well as development of a sound background for further studies in mathematics and mathematics related fields.

Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Units 3 and 4. Study of Specialist Mathematics Units 3 and 4 also assumes concurrent study or previous completion of Mathematical Methods Units 3 and 4.

The areas of study for Specialist Mathematics Units 1 and 2 are 'Algebra, number and structure', 'Data analysis, probability and statistics', 'Discrete mathematics', 'Functions, relations and graphs' and 'Space and measurement'.

At the end of Unit 1 students are expected to have covered the material in the areas of study: 'Algebra, number and structure' and 'Discrete mathematics'. Concepts from these areas of study will be further developed and used in Unit 2 and also in Units 3 and 4.

In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational, real and complex arithmetic, sets, lists, tables and matrices, diagrams, graphs, logic gates and geometric constructions, algorithms, algebraic manipulation, recurrence relations, equations and graphs, with and without the use of technology. They are expected to be able to construct proofs and develop and interpret algorithms to solve problems. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Area of Study 1 - Algebra, number and structure

Area of Study 2 - Discrete mathematics

### Unit 2

The areas of study for Specialist Mathematics Units 1 and 2 are 'Algebra, number and structure', 'Data analysis, probability and statistics', 'Discrete mathematics', 'Functions, relations and graphs' and 'Space and measurement'.

At the end of Unit 2 students are expected to have covered the material in the areas of studies: 'Data analysis, probability and statistics', 'Space and measurement', 'Algebra, number and structure' and 'Functions, relations and graphs'.

In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational, real and complex arithmetic, sets, lists, tables, vectors and matrices, diagrams and geometric constructions, algorithms, algebraic manipulation, equations and graphs, with and without the use of technology. They are expected to be able to construct proofs and develop and interpret algorithms to solve problems. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Area of Study 1 - Data analysis, probability and statistics

Area of Study 2 - Space and measurement

Area of Study 3 - Algebra, number and structure

Area of Study 4 - Functions, relations and graphs

### Unit 3 and 4

Specialist Mathematics Units 3 and 4 consist of the areas of study: 'Algebra, number and structure', 'Calculus', 'Data analysis, probability and statistics', 'Discrete mathematics', 'Functions, relations and graphs', and 'Space and measurement'.

Specialist Mathematics Units 3 and 4 assumes familiarity with the key knowledge and key skills from Mathematical Methods Units 1 and 2; the key knowledge and key skills from Specialist Mathematics Units 1 and 2; and concurrent study or previous completion of Mathematical Methods Units 3 and 4. Together these cover the assumed knowledge and skills for Specialist Mathematics Units 3 and 4, which are drawn on as applicable in the development of content from the areas of study and key knowledge and key skills for the outcomes.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational, real and complex arithmetic, sets, lists, tables and vectors, diagrams and geometric constructions, algorithms, algebraic manipulation, equations, graphs, differentiation, anti-differentiation and integration and inference, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Area of Study 1 - Discrete mathematics

Area of Study 2 - Functions, relations and graphs

Area of Study 3 - Algebra, number and structure

Area of Study 4 - Calculus

Area of Study 5 - Space and measurement

Area of Study 6 - Data analysis, probability and statistics

### **Entry**

Specialist Mathematics Units 3 and 4 assumes familiarity with the key knowledge and skills from Mathematical Methods Units 1 and 2, the key knowledge and skills from Specialist Mathematics Units 1 and 2 topics 'Number systems and recursion' and 'Geometry in the plane and proof', and concurrent or previous study of Mathematical Methods Units 3 and 4. Together these cover the assumed knowledge and skills for Specialist Mathematics, which are drawn on as applicable in the development of content from the areas of study and key knowledge and skills for the outcomes.

### Levels of Achievement

The student's level of achievement for Units 3 and 4 will be determined by School-assessed Coursework. School assessed Coursework tasks must be a part of the regular teaching and learning program and must not unduly add to the workload associated with that program. They must be completed mainly in class and within a limited timeframe.

Units 1 and 2	Unit 3 and 4
Individual school decision on levels of achievement.	School-assessed coursework and two end of year examinations as follows:
	Specialist Maths Unit 3 school-assessed course work: Unit 4 school-assessed course work: Exam 1 (technology free): Exam 2 (technology active):  20 % 40 %

For further information please see the following VCE Study Designs:

**Specialist Mathematics** 

VCE Media provides students with the opportunity to analyse media concepts, forms and products in an informed and critical way. Students investigate the nature of film, television, print, advertising and social media from various perspectives - including an analysis of structure and features. They examine debates about the media's role in contributing to and influencing society. Students integrate these aspects of the study through the individual design and production of their own media representations, narratives and products.

VCE Media supports students to develop their planning and analytical skills, critical and creative thinking and expression, and to strengthen their communication skills and technical knowledge. Students gain knowledge and skills for participation in and contribution to contemporary society.

This study leads to pathways for further study at tertiary level or in vocational education and training settings; including screen and media, marketing and advertising, games and interactive media, communication and writing, graphic and communication design and photography.

### Structure

The study is made up of four units.

### Unit 1 – Media Forms, Representations and Australian Stories

In this unit students develop an understanding of audiences and the construction of representations and meaning in the media. They explore media codes and conventions and the construction of meaning in media products. Students develop research skills to investigate narratives, focusing on production genre and style.

Students also work in a range of media forms and develop and produce representations to demonstrate an understanding of the characteristics of each media, and how they contribute to the communication of meaning.

### Unit 2 - Narrative Across Media Forms

In this unit students further develop an understanding of the concept of narrative in the media. Narratives in both traditional and newer forms include film, television, sound, news, print, photography, games, and interactive digital forms. Students analyse the influence of media technologies, examining a range of media and the effects of convergence and hybridisation on audience engagement, consumption and reception.

Students undertake production activities to design and create narratives that demonstrate the structures and media codes and conventions appropriate to the media form.

### Unit 3 – Media Narratives and Pre-production

In this unit students explore stories that circulate in society through media narratives. Students assess how audiences from different periods of time and contexts are engaged by, consume and read the media.

Students use the pre-production stage of the media production process to design the production of a media product for a specialised audience. They investigate a media form that aligns with their interests and intent, developing an understanding of the media codes and conventions appropriate to audience engagement, consumption and reception. They explore and experiment with media technologies to develop skills in their selected media form, reflecting on and documenting their progress.

### Unit 4 - Media Production and Issues in the Media

In this unit students focus on the production and post-production stages of the media production process, bringing the media production design created in Unit 3 to its realisation. Students develop a media production in response to feedback and through personal reflection, documenting the iterations of their production as they work towards completion.

Students consider the nature of communication between the media and audiences, explore the capacity of the media to be used by governments, institutions and audiences, and analyse the role of the Australian government in regulating the media.

### Entry

There is no pre-requisite for entry into Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

## Assessment - Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	School Assessed coursework, school ass and end of year examination. Unit 3 school assessed course work: Unit 4 school assessed course work: Unit 3 and 4 school assessed task:	10 % 10 % 40 %
	Unit 3 and 4 end of year examination:	40 %

For further information please see the  $\underline{\text{VCAA Media Study Design}}$ 

Active participation in music develops musicianship through creating, performing, responding, and analysing that develops ideas about the ways in which music can interact with other art forms, technology, and design.

The nature of music study allows students to develop their capacity to manage their own learning, work together with others, and engage in activity that reflects the real-world practice of performers, composers, and audiences, working towards the development of a personal voice.

Through performance, students sing and play music, demonstrating their knowledge and practical music skills through refining solo and/or ensemble performances. Students realise music ideas through the demonstration and interpretation of music to convey meaning and/or emotion to an audience. They also explore the manipulation of sound, producing new music works and arrangements.

VCE Music equips students with personal and musical knowledge and skills that enable them to focus on their musicianship in particular areas and follow pathways into tertiary music study or further training in a broad spectrum of music related careers.

### Structure

The study is made up of four units.

### Unit 1 - Organisation of Sound

In this unit students explore and develop their understanding of how music is organised. By performing, creating, analysing, and responding to music works that exhibit different approaches.

- Students prepare and perform ensemble and solo musical works to develop technical control, expression, and stylistic understanding on their chosen instrument.
- Students create (arrange, compose, or improvise) short music exercises that reflect their understanding of the organisation of music and the processes they have studied.
- Students develop knowledge of music language concepts as they analyse and respond to a range of music, becoming familiar with the ways music creators treat elements of music and concepts and use compositional devices to create works that communicate their ideas.

### Unit 2 - Effect in Music

In this unit, students focus on the way music can be used to create an intended effect. By performing, analysing, responding, and creating music, students explore and develop their understanding.

- Students prepare and perform ensemble and solo musical works to further develop technical control, expression and stylistic understanding using their chosen instrument.
- Students create short music exercises that reflect their growing understanding of the organisation of music.
- Students analyse and respond to a wide range of music and continue to develop their understanding of common musical language concepts by identifying, recreating, and notating these concepts.

# MUSIC CONTEMPORARY PERFORMANCE (SOLO AND GROUP)

### Unit 3 - Music Contemporary Performance (Solo and Group)

In this unit students begin developing the program they will present in Unit 4. They use music analysis skills to refine strategies for developing their performances.

Students analyse interpretation in a wide range of recorded music, responding to and analysing music elements, concepts, compositional devices, and music language. Students also learn how to recognise and recreate music language concepts such as scales, melodies, chords, harmony, and rhythmic materials that relate to contemporary music.

### Unit 4 - Music Contemporary Performance (Solo and Group)

Students continue to work towards building a performance program they will present at their end-of-year examination in line with their Statement of Intent. The program will contain at least one performance that is a reimagined version of an existing work and an original work created by an Australian artist since 1990.

Students continue to study the work of other performers and their approaches to interpretation and personal voice in performing music works. They refine selected strategies to optimise their own approach to performance.

Students further develop strategies to address the technical, expressive, and stylistic challenges relevant to works they are preparing for performance.

Students listen and respond to a broader range of recorded music by a variety of performers in contemporary styles. They continue to study music language concepts that relate to contemporary music.



# MUSIC REPERTOIRE PERFORMANCE (SOLO AND ENSEMBLE)

Units 3 and 4

### Unit 3 - Music Repertoire Performance (Solo and Ensemble)

In this unit students begin developing the recital program they will present in Unit 4. This preparation includes consideration of the historical performance practices and interpretative traditions that inform the styles represented in their programs.

Students use music analysis skills to refine strategies for developing their performances. They analyse technical, expressive, and stylistic challenges relevant to the works they are preparing for performance and present these strategies for assessment.

Students analyse interpretation in a wide range of recorded music, responding to and analysing musical elements, concepts, and compositional devices. They develop their ability to identify, recreate and notate music language concepts such as scales, melodies, chords, harmony, and rhythmic materials that relate to the works studied.

### Unit 4 - Music Repertoire Performance (Solo and Ensemble)

In this unit students continue to develop the performance program established in Unit 3 for their end-of-year practical examination. This preparation includes consideration of the historical performance practices and interpretative traditions that inform the styles represented in their programs.

Students use music analysis skills to refine strategies for further developing and presenting their final recital. They analyse technical, expressive, and stylistic challenges relevant to the works they are preparing for performance and present these strategies for assessment.

Students analyse interpretation in a wide range of music, responding to and analysing musical elements, concepts, compositional devices, and music language. Students also learn how to recognise and notate music language concepts such as scales, melodies, chords, harmony, and rhythmic materials that relate to the works studied.

### Entry

To undertake Units 1 and 2 it is recommended that students have successfully completed Year 10 music.

To undertake Units 3 and 4 Solo Performance students should have four years' experience prior to Year 11 on a musical instrument or voice and have reached the level of AMEB music theory grades 1 and 2. Students are required to participate in the College's bands, orchestras or choirs. Students must undertake Unit 3 prior to undertaking Unit 4. Levies are applicable for students who undertake this subject.

### Assessment - Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

### Units 1 and 2

Individual school decision on levels of achievement.

Music Repertoire Performance		Music Contemporary Performance	
Unit 3 School-assessed Coursework: Unit 4 School-assessed Coursework: Unit 4 Performance examination: End-of-year Aural and Written Examination:	20 % 10 % 50 % 20 %	Unit 3 School-assessed Coursework: Unit 4 School-assessed Coursework: Unit 4 Performance examination: End-of-year Aural and Written Examination:	20 % 10 % 50 % 20 %

For further information please see the VCAA Music Study Design

## OUTDOOR AND ENVIRONMENTAL STUDIES Units 1 and 2

### Rationale

VCE Outdoor and Environmental Studies develops students' understandings of outdoor environments, and the ways in which humans interact with, relate to and have impacted outdoor environments over time. 'Outdoor environments' encompasses landscapes, both local and further afield, that range in health from protected wilderness to those heavily impacted by human practices.

### Structure

The study is made up of four units.

### Unit 1 - Connections With Outdoor Environment

This unit examines some of the ways in which Indigenous peoples and non-Indigenous peoples understand and relate to nature through experiencing outdoor environments. The focus is on individuals and their personal responses to experiencing outdoor environments. Through outdoor experiences, students develop practical skills and knowledge to help them act sustainably in outdoor environments.

### Unit 2 – Discovering Outdoor Environments

Students study the effects of natural changes and impacts of land management practices on the sustainability of outdoor environments by examining a number of case studies of specific outdoor environments, including areas where there is evidence of human intervention. Students develop the practical skills required to minimise the impact of humans on outdoor environments.

### Unit 3 – Relationships With Outdoor Environments

The focus of this unit is the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. Case studies of a range of impacts on outdoor environments are examined in the context of the changing nature of human relationships with outdoor environments in Australia over 60,000 years. Students are involved in multiple experiences in outdoor environments, including in areas where there is evidence of human interaction.

### Unit 4 – Sustainable Outdoor Environments

Students explore the sustainable use and management of outdoor environments. They observe and assess the health of outdoor environments and consider the importance of this health for the future of Australian outdoor environments and the Australian population. Students engage in multiple related experiences in outdoor environments, conducting an ongoing investigation into the health of, and care for, these places.

There is a fee incurred with this program, to cover the cost of excursions.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4
A case study An oral presentation which can include the use of multimedia and podcast Data analysis A written response to an issue A visual presentation such as a graphic organiser, concept/mind map, annotated poster or presentation file.	Percentage contributions to the study score in VCE Outdoor and Environmental Studies are: Unit 3 school-assessed coursework: Unit 4 school-assessed coursework: End-of-year examination:  20 % 50 %

Philosophy provides students with the opportunity to read and understand some powerful ideas that have shaped our culture. Philosophy grapples with some of the most profound questions, such as: What is the nature of reality? Is it possible to attain absolute certainty about anything? Are right and wrong simply matters of culture? Is it rational to have religious beliefs? Studying philosophy develops the ability to clarify concepts, analyse problems and construct reasonable, coherent arguments.

### Structure

The study is made up of 4 units

### Unit 1 – Philosophy, existence and knowledge

What is the nature of reality? How can we acquire certain knowledge? These are some of the questions that have challenged humans for millennia and underpin ongoing endeavours in areas as diverse as science, justice and the arts. This unit engages students with fundamental philosophical questions through active, guided investigation and critical discussion of 2 key areas of philosophy: epistemology and metaphysics. The emphasis is on philosophical inquiry - 'doing philosophy' - through the formulation and exploration of questions in philosophical exchanges with others. Hence the study and practice of techniques of philosophical reasoning are central to this unit. As students learn to think philosophically, appropriate examples of philosophical viewpoints and arguments, both contemporary and historical, are used to support, stimulate and enhance their thinking about central concepts and problems. At least one of these examples will be from a primary philosophical text using a complete text or an extract. As students investigate central concepts and problems, they will also consider the relationship between philosophical problems and relevant contemporary debates.

### Unit 2 – Questions of Value

What are the foundations of our judgments about value? What is the relationship between different types of value? How, if at all, can particular value judgments be defended or criticised?

This unit enables students to explore these questions in relation to different categories of value judgment within the realms of morality, political and social philosophy and aesthetics. Students also explore ways in which viewpoints and arguments in value theory can inform and be informed by contemporary debates. They study at least one primary philosophical text, using the complete text or an extract, and develop a range of skills including formulating philosophical questions and developing philosophical perspectives.

### Unit 3 – The Good Life

This unit considers the crucial question of what it is for a human to live well. It explores questions of relevance to our own good lives - what is happiness? What role should pleasure and self-discipline, friendship and love play in the good life? - as well questions regarding the good life as it may be understood within the context of our relationships with others beyond our immediate communities. Students consider the implications of adopting particular perspectives, viewpoints and arguments for questions of relevance to contemporary living, such as our relationship with those beyond our immediate communities, non-human animals and the broader natural world.

Students engage with the set texts to develop perspectives on questions relating to the good life, including questions of relevance to contemporary living. Through critical reflection on ideas, perspectives, viewpoints and arguments, students develop and defend their own philosophical positions

### Unit 4 – On believing

In recent decades, developments in information and communication technologies have changed the way we share beliefs and acquire and justify knowledge. More than ever, we rely on the testimony of others, in particular, those we judge to be experts. But what is an expert? What qualities must testimony have to be trusted? And, in a world filled with multiple and often contradictory sources, how do we separate good beliefs from poor beliefs?

This unit focuses on interpersonal aspects of belief and belief formation, considering what it means to believe well by examining the nature of belief and the grounds for accepting or rejecting beliefs. Across 2 areas of study, students explore what our obligations are in relation to belief; when we should adjust or change our beliefs; and to what extent we should take responsibility for fostering the good beliefs of others and the conditions that make them possible. Through so doing, students are invited to consider the interrelationship between believing well and living well.

In Area of Study 1, students use concepts, arguments and viewp oints from the set texts to develop perspectives and justified philosophical positions on belief formation and justification in relation to a range of general questions. Students apply their learning from Area of Study 1 to identify and engage with epistemological issues that arise from case studies suggested by selected contexts.

### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

## Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	School-assessed coursework and an endexamination. Unit 3 school-assessed coursework: Unit 4 school-assessed coursework: Units 3 and 4 - examination:	d-of-year 25 % 25 % 50 %

For further information please see the VCAA Philosophy Study Design



## PHYSICAL EDUCATION

### Rationale

The study of VCE Physical Education enables students to integrate a contemporary understanding of the theoretical concepts of physical activity with practical application. This develops the knowledge and skills required to critically evaluate influences that affect their own and others' participation and performance in movement.

This study equips students with the appropriate knowledge and skills to plan, develop and maintain their involvement in physical activity, sport and exercise across their lifetime. The study also prepares students for employment and/or further study at the tertiary level or in vocational education and training settings in fields such as exercise and sport science, health science, education, recreation, sport development and coaching, health promotion and related careers.

### Structure

The study is made up of four units.

### Unit 1 – The Human Body in Motion

In this unit, students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Students investigate the role and function of the main structures in each system and how they respond to movement. Through participation in practical activities, students explore and analyse the relationships between the body systems and movement, and how these systems interact and respond at various intensities. Students investigate possible conditions and injuries associated with the musculoskeletal system and recommend and implement strategies to minimise and manage such injuries and conditions. They consider the ethical implications of using permitted and prohibited practices to improve the performance of the body systems, evaluating perceived physiological benefits and describing potential harms.

### Unit 2 - Physical Activity, Sport, Exercise and Society

This unit develops students' understanding of physical activity, sport and exercise from a participatory perspective. Students are introduced to types of physical activity and the role that physical activity participation and sedentary behaviour plays in their own health and wellbeing, as well as in other population groups and contexts.

Through a series of practical activities, students experience and explore different types of physical activity promoted within and beyond their community. They gain an appreciation of the movement required for health benefits and the consequences of physical inactivity and sedentary behaviour. Using various methods to assess physical activity and sedentary behaviour, students analyse data to investigate perceived barriers and enablers, and explore opportunities to enhance participation in physical activity. Students explore and apply the socialecological model to critique a range of individual- and settings-based strategies that are effective in promoting participation in regular physical activity. They create and participate in a personal plan with movement strategies that optimise adherence to physical activity and sedentary behaviour guidelines.

### Unit 3 - Movement Skills and Energy for Physical Activity, Sport and Excercise

This unit introduces students to principles used to analyse human movement from a biophysical perspective. Students use a variety of tools and coaching techniques to analyse movement skills and apply biomechanical and skill-acquisition principles to improve and refine movement in physical activity, sport and exercise. They use practical activities to demonstrate how correctly applying these principles can lead to improved performance outcomes.

Students consider the cardiovascular, respiratory and muscular systems and the roles of each in supplying oxygen and energy to the working muscles. They investigate the characteristics and interplay of the 3 energy systems for performance during physical activity, sport and exercise. Students explore the causes of fatigue and consider different strategies used to postpone fatigue and promote recovery.

### Unit 4 – Training to Improve Performance

In this unit, students' participation and involvement in physical activity will form the foundations of understanding how to improve performance from a physiological perspective. Students analyse movement skills and fitness requirements and apply relevant training principles and methods to improve performance at various levels (individual, club and elite).

### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Individual school decision on levels of achievement.	Percentage contributions to the study score in VCE Physical Education are as follows: Unit 3 school-assessed coursework: Unit 4 school-assessed coursework: End-of-year examination:  50 %

The study of Physics, has led to developments, which have profoundly influenced the world. This study covers the areas that traditionally are the basis of courses at this level, with an emphasis on the foundation areas of mechanics and electricity. A contextual approach to the study has been adopted so that students appreciate the relevance of physics to the physical, technological and social worlds.

### Structure

The study is made up of four units. Units 3 and 4 are to be taken as a sequence. The development of practical skills is an essential part of all units.

### Unit 1 – How Is Energy Useful To Society?

In this unit students examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain energy. Models used to understand light, thermal energy, radioactivity, nuclear processes and electricity are explored. Students apply these physics ideas to contemporary societal issues: communication, climate change and global warming, medical treatment, electrical home safety and Australian energy needs.

### Unit 2 – How Does Physics Help Us To Understand The World?

In this unit students explore the power of experiments in developing models and theories. They investigate a variety of phenomena by making their own observations and generating questions, which in turn lead to experiments.

In Area of Study 1, students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary and apply these concepts to a chosen case study of motion.

In Area of Study 2, students choose one of eighteen options related to climate science, nuclear energy, flight, structural engineering, biomechanics, medical physics, bioelectricity, optics, photography, music, sports science, electronics, astrophysics, astrobiology, Australian traditional artefacts and techniques, particle physics, cosmology and local physics research. The selection of an option enables students to pursue an area of interest through an investigation and using physics to justify a stance, response or solution to a contemporary societal issue or application related to the option.

A student-adapted or student-designed scientific investigation is undertaken in Area of Study 3. The investigation involves the generation of primary data and draws on the key science skills and key knowledge from Area of Study 1 and/or Area of Study 2.

### Unit 3 – How Do Fields Explain Motion And Electricity?

In this unit students use Newton's laws to investigate motion in one and two dimensions. They explore the concept of the field as a model used by physicists to explain observations of motion of objects not in apparent contact. Students compare and contrast three fundamental fields - gravitational, magnetic and electric - and how they relate to one another. They consider the importance of the field to the motion of particles within the field. Students examine the production of electricity and its delivery to homes. They explore fields in relation to the transmission of electricity over large distances and in the design and operation of particle accelerators.

A student-designed practical investigation involving the generation of primary data and including one continuous, independent variable related to fields, motion or light is undertaken either in Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 2.

### Unit 4 – How Have Creative Ideas And Investigation Revolutionised Thinking In Physics?

A complex interplay exists between theory and experiment in generating models to explain natural phenomena. Ideas that attempt to explain how the Universe works have changed over time, with some experiments and ways of thinking having had significant impact on the understanding of the nature of light, matter and energy. Wave theory, classically used to explain light, has proved limited as quantum physics is utilised to explain particle-like properties of light revealed by experiments. Light and matter, which initially seem to be quite different, on very small scales have been observed as having similar properties. At speeds approaching the speed of light, matter is observed differently from different frames of reference. Matter and energy, once quite distinct, become almost synonymous.

In this unit, students explore some monumental changes in thinking in Physics that have changed the course of how physicists understand and investigate the Universe. They examine the limitations of the wave model in describing light behaviour and use a particle model to better explain some observations of light. Matter, that was once explained using a particle model, is re-imagined using a wave model. Students are challenged to think beyond how they experience the physical world of their everyday lives to thinking from a new perspective, as they

## PHYSICS CONTINUED...

imagine the relativistic world of length contraction and time dilation when motion approaches the speed of light. They are invited to wonder about how Einstein's revolutionary thinking allowed the development of modern-day devices such as the GPS.

A student-designed practical investigation involving the generation of primary data and including one continuous, independent variable related to fields, motion or light is undertaken either in Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 2.

For Unit 1 a minimum of a "C" Grade in Year 10 Maths Methods is expected. Students are advised to take Unit 1 and 2 before Unit 3. Students who enter the study at Unit 3 should be willing to undertake some preparation as specified by the teacher. Students must undertake Unit 3 prior to Unit 4.

### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	School-assessed coursework and end-of-year exa Unit 3 school-assessed coursework (not including assessment of the detailed study): Unit 4 school-assessed coursework (including Assessment of the detailed study: Units 3 and 4 examination:	30 % 20 % 50 %

For further information please see the VCAA Physics Study Design



VCE Psychology is designed to enable students to explore the complex interactions between thought, emotions and behaviour. They develop an insight into biological, psychological and social factors and the key science skills that underpin much of psychology. VCE Psychology is designed to promote students' understanding of how society applies such skills and psychological concepts to resolve problems and make scientific advancements. The study is designed to promote students' confidence and their disposition to use the information they learn in the study in everyday situations. Studying VCE Psychology enables students to develop their capacity to think, question and analyse psychological research and critically reflect on the findings of experiments and research. They are encouraged to use their problem-solving skills, including critical and creative thinking, to establish and articulate their understandings through their class discussions, practical work and written responses - all of which may help students to think deeply and critically about their own lives, manage life circumstances and reach personal goals.

Students who study VCE Psychology can consider a pathway within this discipline that can lead to a range of careers and roles that work with diverse populations and communities. Areas that registered psychologists may work in include clinical, developmental, educational, environmental, forensic, health, neuropsychology, sport and exercise, and organisational psychology. Psychologists can also work in cross-disciplinary areas such as academia and research institutions, medical research, management and human resources, and government, corporate and private enterprises, or as part of ongoing or emergency support services in educational and institutional settings. Students exposed to the study of VCE Psychology recognise the diverse nature of the discipline and career opportunities within the field. These opportunities include careers and roles that do not involve being a registered psychologist, including roles in aged, family and child services; case managers; communications specialists; counsellors; community health and welfare roles; health services support roles; human resource specialists; managers; marketing and market research roles; office administration roles; policy and planning roles; probation and parole services roles; and social work and teaching roles.

### Structure

The study is made up of four Units

### Unit 1 – How Are Behaviour And Mental Processes Shaped?

In this unit students examine the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary knowledge from Western and non-Western societies, including Aboriginal and Torres Strait Islander peoples, has made to an understanding of psychological development and to the development of psychological models and theories used to predict and explain the development of thoughts, emotions and behaviours. They investigate the structure and functioning of the human brain and the role it plays in mental processes and behaviour and explore brain plasticity and the influence that brain damage may have on a person's psychological functioning.

A student-directed research investigation into contemporary psychological research is undertaken in Area of Study 3. The investigation involves the exploration of research, methodology and methods, as well as the application of critical and creative thinking to evaluate the validity of a research study by analysing secondary data. The investigation draws on the key science skills and key knowledge from Area of Study 1 and/or Area of Study 2.

### Unit 2 - How Do Internal And External Factors Influence Behaviour And Mental Processes?

In this unit students evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of individuals and groups, recognising that different cultural groups have different experiences and values. Students are encouraged to consider Aboriginal and Torres Strait Islander people's experiences within Australian society and how these experiences may affect psychological functioning.

Students examine the contribution that classical and contemporary research has made to the understandings of human perception and why individuals and groups behave in specific ways. Students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted.

A student-adapted or student-designed scientific investigation is undertaken in Area of Study 3. The investigation involves the generation of primary data and is related to internal and external factors that influence behaviour and mental processes. The investigation draws on key knowledge and key science skills from Area of Study 1 and/or Area of Study 2.

### Unit 3 - How Does Experience Affect Behaviour And Mental Processes?

In this unit students investigate the contribution that classical and contemporary research has made to the understanding of the functioning of the nervous system and to the understanding of biological, psychological and social factors that influence learning and memory.

Students investigate how the human nervous system enables a person to interact with the world around them. They explore how stress may affect a person's psychological functioning and consider stress as a psychobiological process, including emerging research into the relationship between the gut and the brain in psychological functioning.

Students investigate how mechanisms of learning and memory lead to the acquisition of knowledge and the development of new and changed behaviours. They consider models to explain learning and memory as well as the interconnectedness of brain regions involved in memory. The use of mnemonics to improve memory is explored, including Aboriginal and Torres Strait Islander peoples' use of place as a repository of memory.

A student-designed scientific investigation involving the generation of primary data related to mental processes and psychological functioning is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4 Outcome 3. The design, analysis and findings of the investigation are presented in a scientific poster format as outlined on pages 15 and 16.

### Unit 4 – How Is Mental Wellbeing Supported And Maintained?

In this unit students explore the demand for sleep and the influences of sleep on mental wellbeing. They consider the biological mechanisms that regulate sleep and the relationship between rapid eye movement (REM) and nonrapid eye movement (NREM) sleep across the life span. They also study the impact that changes to a person's sleep-wake cycle and sleep hygiene have on a person's psychological functioning and consider the contribution that classical and contemporary research has made to the understanding of sleep.

Students consider ways in which mental wellbeing may be defined and conceptualised, including social and emotional wellbeing (SEWB) as a multidimensional and holistic framework to wellbeing. They explore the concept of mental wellbeing as a continuum and apply a biopsychosocial approach, as a scientific model, to understand specific phobia. They explore how mental wellbeing can be supported by considering the importance of biopsychosocial protective factors and cultural determinants as integral to the wellbeing of Aboriginal and Torres Strait Islander peoples.

A student-designed scientific investigation involving the generation of primary data related to mental processes and mental wellbeing is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4 Outcome 3. The design, analysis and findings of the investigation are presented in a scientific poster format as outlined on pages 15 and 16.

### Entry

There are no prerequisites for entry in Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. However, students who enter the study at unit 3 may need to undertake preparatory work .

### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4
Individual school decision on levels of achievement.	School-assessed coursework and end-of-year examination Unit 3 school-assessed coursework: 20 % Unit 4 school-assessed coursework: 30 % Units 3 and 4 examination: 50 %

For further information please see the VCAA Psychology Study Design

VCE Systems Engineering promotes innovative systems thinking and problem-solving skills through the application of the systems engineering process. The study is based on integrated mechanical and electrotechnological engineered systems.

The study provides opportunities for students to learn about and engage with systems from a practical and purposeful perspective. Students gain knowledge and understanding about technological systems and their applications.

VCE Systems Engineering integrates aspects of designing, planning, producing, testing and evaluating in a project management process. It prepares students for careers in engineering, manufacturing and design through a university or TAFE vocational study pathway, employment, apprenticeships and traineeships. The study provides a rigorous academic foundation and a practical working knowledge of design strategies, production processes and evaluation practices. People with these skills, and the ability to apply systems engineering processes, are in increasing demand as participants in teams that are engaged with complex and multidisciplinary projects.

### Structure

The study is made up of four units.

### Unit 1 – Mechanical Systems

This unit focuses on engineering fundamentals as the basis of understanding concepts, principles and components that operate in mechanical systems. The term 'mechanical systems' includes systems that utilise all forms of mechanical components and their linkages.

### Unit 2 – Electrotechnological Systems

In this unit students study fundamental electrotechnological engineering principles. The term 'electrotechnological' encompasses systems that include electrical/electronic circuitry including microelectronic circuitry. Through the application of the systems engineering process, students create operational electrotechnological systems, which may also include mechanical components or electro-mechanical subsystems.

### Unit 3 - Integrated and Controlled Systems

In this unit students study engineering principles used to explain physical properties of integrated systems and how they work. Students design and plan an operational, mechanical and electrotechnological integrated and controlled system. They learn about the technologies used to harness energy sources to provide power for engineered systems.

### Unit 4 - Systems Control

In this unit students complete the creation of the mechanical and electrotechnological integrated and controlled system they researched, designed, planned and commenced production of in Unit 3. Students investigate new and emerging technologies, consider reasons for their development and analyse their impacts.

### Entry

There are no prerequisites for Units 1 and 2. Students should take Unit 2 prior to Unit 3 and Unit 3 prior to Unit 4.

### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	School-assessed coursework and examinations School-assessed Coursework: 20 % School-assessed Task: 50 % End-of-year examination: 30 %	6

For further information please see the VCAA Systems Engineering Study Design

## VISUAL COMMUNICATION DESIGN

### Rationale

Visual communication design can inform people's decisions about where and how they live and what they buy and consume. The visual presentation of information influences people's choices about what they think, what they need or want. The study provides students with the opportunity to develop informed, critical and discriminating approaches to understanding and using visual communications, and nurtures their ability to think creatively about design solutions. Design thinking, which involves the application of creative, critical and reflective techniques, supports skill development in areas beyond design, including science, business, marketing and management.

The rapid acceleration of the capabilities and accessibility of digital design technologies has brought new challenges to visual communication design practices. Through the consideration of ethical and environmental sustainability issues, students are able to make informed choices that affect current and future practices. The study of Visual Communication Design can provide pathways to training and tertiary study in design and design-related studies, including communication, industrial and fashion design, architecture and media.

### Structure

The study is made up of four units.

### Unit 1 – Introduction to Visual Communication Design

This unit focuses on using visual language to communicate messages, ideas and concepts. This involves acquiring and applying design thinking skills as well as drawing skills to create messages, ideas and concepts. both visible and tangible. Students practice their ability to draw what they observe and they use visualization drawing methods to explore their own ideas and concepts. Students develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications.

Through experimentation and exploration of the relationship between design elements and design principles, students develop an understanding of how they affect the visual message and the way information and ideas are read and perceived. Students review the contextual background of visual communication through an investigation of design styles. This research introduces students to the broader context of the place and purpose of design. Students are introduced to the importance of copyright and intellectual property and the conventions for acknowledging sources of inspiration.

In this unit students are introduced to four stages of the design process: research, generation of ideas, development of concepts and refinement of visual communications.

### Unit 2 – Applications of Visual Communication within Design Fields

This unit focuses on the application of visual communication design knowledge, design thinking and drawing methods to create visual communications to meet specific purposes in designated design fields.

Students use presentation-drawing methods that incorporate the use of technical drawing conventions to communicate information and ideas associated with the environmental or industrial fields of design. They also investigate how typography and imagery are used in these fields as well as the communication field of design. They apply design-thinking skills when exploring ways in which images and type can be manipulated to communicate ideas and concepts in different ways in the communication design field. Students develop an understanding of the design process detailed on pages 10 and 11 as a means of organizing their thinking about approaches to solving design problems and presenting ideas. In response to a brief, students engage in the stages of research, generation of ideas and development and refinement of concepts to create visual communications.

### Unit 3 – Visual Communication Design Practices

In this unit students gain an understanding of the process designers employ to structure their thinking and communicate ideas with clients, target audiences, other designers and specialists. Through practical investigation and analysis of existing visual communications, students gain insight into how the selection of methods, media and materials, and the application of design elements and design principles, can create effective visual communications for specific audiences and purposes. They investigate and experiment with the use of manual and digital methods, media and materials to make informed decisions when selecting suitable approaches for the development of their own design ideas and concepts.

Students use their research and analysis of the process of visual communication designers to support the development of their own designs. They establish a brief for a client and apply design thinking through the design process. They identify and describe a client, two distinctly different needs of that client, and the purpose, target audience, context and constraints relevant to each need.

# VISUAL COMMUNICATION DESIGN CONTINUED...

Design from a variety of historical and contemporary design fields is considered by students to provide directions, themes or starting points for investigation and inspiration for their own work. Students use observational and visualization drawings to generate a wide range of design ideas and apply design-thinking strategies to organize and evaluate their ideas. The brief and research underpin the developmental and refinement work undertaken in Unit 4.

### Unit 4 – Visual Communication Design Development, Evaluation and Presentation

The focus of this unit is on the development of design concepts and two final presentations of visual communications to meet the requirements of the brief. This involves applying the design process twice to meet each of the stated communication needs.

Having completed their brief and generated ideas in Unit 3, students continue the design process by developing and refining concepts for each communication need stated in the brief. They utilise a range of digital and manual two- and three-dimensional methods, media and materials. They investigate how the application of design elements and design principles creates different communication messages and conveys ideas to the target audience.

As students revisit stages to undertake further research or idea generation when developing and presenting their design solutions, they develop an understanding of the iterative nature of the design process. Ongoing reflection and evaluation of design solutions against the brief assists students with keeping their endeavours focused.

### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 and Unit 4 as a sequence.

### Assessment – Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the unit as well as individual school decision on levels of achievement.

### Levels of Achievement

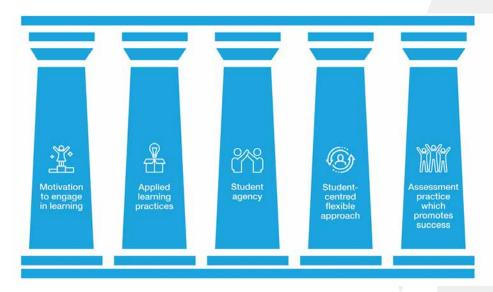
Units 1 and 2	Unit 3 and 4	
Individual school decision on levels of achievement.	School-assessed coursework and an end-of-year examination.	
	Unit 3 school-assessed coursework: 25 9	•
	Units and 4 school-assessed task: 40 % End-of-year examination: 35 %	-
		•

For further information please see the VCAA Visual Communication Design Study Design

## Victorian Certificate of Education - Vocational Major (VCE VM)

The VCE Vocational Major (VM) is a vocational and applied learning program within the VCE designed to be completed over a minimum of two years. The VCE VM will give students greater choice and flexibility to pursue their strengths and interests and develop the skills and capabilities needed to succeed in further education, work and life.

### 5 Pillars of Applied Learning



It prepares students to move into apprenticeships, traineeships, further education and training, university (via non-ATAR pathways) or directly into the workforce.

The purpose of the VCE VM is to provide students with the best opportunity to achieve their personal goals and aspirations in a rapidly changing world by:

- equipping them with the skills, knowledge, values and capabilities to be active and informed citizens, lifelong learners and confident and creative individuals; and
- empowering them to make informed decisions about the next stages of their lives through real life workplace experiences.

	Further Study options	Employment options
VCE	Tertiary study options requiring an ATAR	Apprenticeship or employment
VCE VM	Tertiary study options not requiring an ATAR	Apprenticeship or employment

## Requirements

VCE Vocational Major is normally a two-year course of study.

### Satisfactory Completion of the VCE Vocational Major

Students must satisfactorily complete the following units to be awarded the VCE Vocational Major.

These units include:

- Literacy
- Numeracy
- Personal Development Skills

- Work Related Skills
- VET
- Structured Workplace Learning

VCE Vocational Major Literacy focuses on the development of the knowledge and skills required to be literate in Australia today. The key knowledge and key skills encompass a student's ability to interpret and create texts that have purpose, and are accurate and effective, with confidence and fluency. The development of literacy in this study is based upon applied learning principles, making strong connections between students' lives and their learning.

### Structure

The study is made up of four units.

### Unit 1 and 2

- Literacy for personal use
- Understanding and creating digital texts
- Understanding Issues and Voices
- Responding to opinions

### Units 3 and 4

- Accessing and understanding information, organisational and procedural texts
- Creating and responding to organisational, informational or procedural texts
- Understanding and engaging with literacy for advocacy
- Speaking to advise or to advocate.

## NUMERACY

Units 1 and 2 Units 3 and 4

### Rationale

VCE Vocational Major Numeracy focuses on enabling students to develop and enhance their numeracy skills to make sense of their personal, public and vocational lives. This study allows students to explore the underpinning mathematical knowledge of number and quantity, measurement, shape, dimensions and directions, data and chance, the understanding and use of systems and processes, and mathematical relationships and thinking. This mathematical knowledge is then applied to tasks which are part of the students' daily routines and practices, but also extends to applications outside the immediate personal environment, such as the workplace and community.

### Structure

The study is made up of four units.

### Unit 1 to 4

- Number
- Shape
- Quantity and measures
- Relationships
- Dimension and direction
- Data

- Uncertainty
- Systematics
- Relationships

## WORK RELATED SKILLS

Units 1 and 2 Units 3 and 4

### Rationale

VCE Vocational Major Work Related Skills (WRS) examines a range of skills, knowledge and capabilities relevant to achieving individual career and educational goals. In VM Work Related Skills, students will develop the knowledge, skills and experiences to be active and engaged citizens and future members of the workforce, with the ability to communicate effectively, advocate for themselves and be adaptable to change. The study of WRS leads to opportunities across all industries and areas of work as well as in further education, and provides young people with the tools they need to succeed in the future. The study considers four key areas: the future of work; workplace skills and capabilities; industrial relations and the workplace environment and practice; and the development of a personal portfolio.

### Structure

The study is made up of four units.

### Unit 1 and 2

- Careers and Learning for the future
- Workplace skills and capabilities

### Units 3 and 4

- Industrial relations, workplace environment and practice
- Communication and collaboration

Units 1 and 2 Units 3 and 4

### Rationale

VCE Vocational Major Personal Development Skills (PDS) takes an active approach to personal development, self-realisation and citizenship by exploring interrelationships between individuals and communities. PDS focuses on health, wellbeing, community engagement and social sciences, and provides a framework through which students seek to understand and optimise their potential as individuals and as members of their community. This study provides opportunities for students to explore influences on identity, set and achieve personal goals, interact positively with diverse communities, and identify and respond to challenges. Students will develop skills in self-knowledge and care, accessing reliable information, teamwork, and identifying their goals and future pathways. PDS explores concepts of effective leadership, self-management, project planning and teamwork to support students to engage in their work, community and personal environments.

#### Structure

The study is made up of four units.

#### Unit 1 and 2

- Healthy Individuals
- Connecting with the community

#### Units 3 and 4

- Leadership and teamwork
- Community project

### STRUCTURED WORKPLACE LEARNING

All VCE Vocational Major (VM) students are required to participate in a weekly Structured Workplace Learning Arrangement with an Employer as part of their VM studies.

It is the responsibility of the student to have secured a Structured Work placement for 2025. Students will be provided with advice and assistance from the Careers team if needed.

The Work placement needs to support their VET course of study.

As a VCE Vocational Major student, I acknowledge that:

- I will need to secure a structured workplace learning position, linked to my VET area of study, in order to undertake VM (dates for structured workplace learning will be given during step up).
- I will attend all classes and complete all the required work to a satisfactory standard

Student Signature	Date:
Parent/Guardian Signature	Date:
Counsellor Signature	Date:
Senior School Leader Signature	Date:

### Helping students get a career HEADSTART

/HEADSTART is placing students into the workforce while they are still at school by starting a part time apprenticeship or traineeship.

/HEADSTART gives students more time in the workplace to develop the knowledge and skills today's employers are looking for. Students finish school with their VCE Vocational Major, as well as significant progress towards, or completion of a Certificate III trade qualification- giving them a head start on everyone else.

#### Courses available

Students can choose Apprenticeships and Traineeship courses in key industries such as building & construction, community services & health, business & primary industries.

#### How /HEADSTART works with schools

Depending on the students and employer needs, students will go to school some days and work on the other days. Students may undertake paid employment for:

- One day a week in Yr 10
- 2 days a week in Yr 11 & 12

#### What do students get?

- A /HEADSTART Pathway Plan tailored to the specific needs of the student and school
- One-to one support from a /HEADSTART Coordinator to monitor the students and keep them on the right track
- Quality assured training through TAFE's and Skills First contracted providers
- Their VCE Vocational Major Certificate
- Significant progress towards, or completion of a Certificate III trade qualification
- Payment of a fair training wage
- A tailored pathway into a priority industry career
- Transition to full time apprenticeship on completion of their VCE Vocational Major.

Talk to the Careers Team for more information.

Fees may apply to cover costs of tuition & service fees, equipment, clothing and tools.







### Vocational Education and Training (VET)

#### What is VET?

Vocational Education and Training (VET) courses provide an opportunity for students to gain a nationally recognised vocational qualification as part of either the VCE or VCE VM. Scored VET subjects (courses that have a final exam) receive a study score for Units 3 and 4 studies that contributes to the ATAR. VET subjects that have 3-4 sequence, but don't have an exam, provide VCE students with 10% bonus of their primary four subjects. Block credit recognition is available for subjects which are not scored.

### Where are the courses held?

VET courses are delivered by a Registered Training Organisation, such as a TAFE, and may include a Structured Workplace Learning Placement component, where students demonstrate acquired skills and knowledge in an industry setting. The VET course may be delivered at a TAFE or a host school.

#### Features of VET

#### VET:

- Is a two year program combining general VCE VM or VCE studies and accredited vocational education and training
- Enables students to complete a nationally recognised vocational qualification and senior studies at the same time
- Focuses on students developing industry specific and workplace skills
- Is a vocationally orientated program designed to meet the needs of industry
- Programs count towards VCE and VCE VM programs
- Programs can contribute to the ATAR score, either as a 10% increment or as a Study Score derived from course work tasks and an end of year examination
- · Prepares students for the workforce
- Programs articulate directly into further education and training at TAFE

### **VET Attendance Policy**

In order to successfully complete the course students are expected to attend all vet classes. Students are permitted two absences (8 hours) a semester or four (16 hours) for the year. An additional two approved absences will be allowed for school camps, excursions or illness with a medical certificate.

### How to apply for a VET Course

Students who wish to apply for a VET subject will need to complete a VET application form at Course Counselling and submit to the front office by the due date.

### What courses are accessed through the Brimbank VET Cluster (BVC)

Depending on student demand the following VET programs are offered.

#### **VET PROGRAMS IN 2025**

- Certificate III in Acting (Screen)
- Certificate III in Allied Health Assistance
- Certificate II in Animal Care
- Certificate II in Applied Fashion & Design
- Certificate II in Automotive Vocational Preparation
- Certificate III in Baking
- Certificate II in Building & Construction
- Certificate II & III in Business
- Certificate III in Community Services
- Certificate II in Cookery
- Certificate II in Cookery & II in Hospitality
- Certificate II in Dance
- Certificate III In Early Childhood Education
- Certificate II in Electrotechnology Studies
- Certificate III in Emerging Technologies
- Certificate III in Enabling Technologies
- Certificate II in Engineering Studies
- Certificate III in Events
- Certificate II in Furniture Making
- Certificate III in Health Services Assistance
- Certificate II in Horticulture
- Certificate III in Information Digital Media & Technology
- Certificate III in Laboratory Skills
- Certificate II in Make-Up
- Certificate II in Work Skills
- Certificate III in Music Performance
- Certificate III in Music Sound Production
- Certificate II in Picture Framing
- Certificate II in Plumbing
- Certificate II in Retail Cosmetics
- Certificate II in Salon Assistant
- Certificate III in Screen and Media
- Certificate III in Screen and Media (GAMING)
- Certificate II in Signage and Graphics
- Certificate II in Small Business Management
- Certificate III in Sports, Aquatics and Recreation

Please note that only VCE Vocational Major students can enrol in VET courses offered in the Brimbank VET Cluster. VCE students may undertake VET programs offered at VUSC only. Please refer to the VET Cluster Handbook for full course details.

Due to arrangements with other institutions, there is limited availability of some VET courses after 1 May. Late enrolments to VET Programs (after 1 May) must be individually approved by the Applied Learning Leader and may not be available in all cases.

### Which VET courses are offered at Victoria University Secondary College?

Certificate II Building and Construction

Certificate III in Sports, Aquatics and Recreation

Certificate III in Business

Victoria University Secondary College, Senior Campus

Victoria University Secondary College, Senior Campus

Victoria University Secondary College, Senior campus



## Future Pathways — Create The Future

### **Business Studies Options**

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Accounting
- Business Administration
- · Banking and Finance
- Commerce

- Human Resource Management
- Marketing and Sales
- Legal Studies
- Logistics

### **VCE Course**

English (Units 1-4)

Choose From	Other Suggested Units
Accounting (Units 1–4)	Art Creative Practice
Economics (Units 1-4)	History
Legal Studies (Units 1-4)	Psychology
Business Management (Units 1-4)	Chinese
Applied Computing (Units 1-4)	Visual Communication Design
Mathematics (Units 1-4)	

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

### **VET Courses**

Choose From	Other Suggested Units
Certificate III in Business	Certificate II in Signage and Graphics
Certificate II in Information Digital Media and Technology	
Certificate II in Small Business Management	
Certificate III Work Skills	

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)	
Accountant	Cert IV in Accounting and	Bachelor of Accounting	
Financial Planner	Bookkeeping	Bachelor of Business	
Human Resources Officer	Diploma of Business	Bachelor of Business	
Market Researcher	Cert IV in Banking Services	(Event Management)	
Stockbroker	Diploma of Accounting	Bachelor of Business	
Real Estate Agent	Diploma of Tertiary Studies	(Sports Management)	
Occupational Health and Safety	(Business) ty	(Business) Bachelor of Commerce (Economics and Finance)	Bachelor of Commerce (Economics and Finance)
Officer		Arts/Global Studies	
		Bachelor of Business/Bachelor of Information Technology	

### Before finalising units

### Behavioural Science Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- **Community Services** Occupational Therapy
- Counselling/Welfare
- Criminology

- Social Work
- Public Health
- Psychology
- Child Care
- Nursing

### **VCE Course**

English (Units 1–4)

Choose From	Other Suggested Units
Psychology (Units 1–4)	Physical Education
Biology (Units 1-4)	Chinese
Mathematics (Units 1-4)	Applied Computing
Health and Human Development (Units 1-4)	Legal Studies
	Extended Investigation

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

### **VET Courses**

Choose From	Other Suggested Units
Certificate III Early Childhood Education	
Certificate III in Community Services	
Certificate III in Allied Health Assistance	
Certificate III in Health Service Assistance	

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Criminologist	Diploma of Justice	Bachelor of Health Science
Social Worker	Diploma of Youth Work	Bachelor (Honours) in Psychology
Psychologist	Diploma of Early Childhood	Bachelor of Nursing
Child Care Worker	Education and Care	Bachelor of Forensic Science/
Nursing	Certificate IV in Legal Services	Criminology
Youth Worker	Certificate IV in Disability	Bachelor of Social Work
Police Officer	Diploma of Nursing	Bachelor of Youth Work
		Bachelor of Youth Work/Criminal Justice
		Bachelor of Psychological Science

### Before finalising units

### Community and Welfare Studies Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Social Work
- Police Force
- Interpreting
- Youth Work
- Psychology

- Teaching
- Legal Studies
- Welfare Studies
- Religious Studies

### **VCE** Course

English (Units 1-4)

Choose From	Other Suggested Units
Psychology (Units 1–4)	Computing
Physical Education (Units 1-4)	Mathematics
Health and Human Development (Units 1-4)	Chemistry
Legal Studies (Units 1-4)	Biology
History (Units 1–4)	Chinese
Philosophy (Units 1–4)	Extended Investigation

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

### **VET Courses**

Choose From	Other Suggested Units
Certificate III in Early Childhood Education	Certificate III in Sports, Aquatics and Recreation
Certificate III in Community Services	Certificate III in Sports, Aquatics and Recreation (Soccer)
Certificate III in Allied Health Assistance	
Certificate III in Health Service Assistance	

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Police Officer	Diploma of Justice	Bachelor of Social Work/
Social Worker	Diploma of Youth Work	Bachelor of Social Science
Psychologist	Diploma of Early Childhood	Bachelor of Health Science
Child Care Worker	Education and Care	Bachelor (Honours) in Psychology
	Diploma of Community Services	Bachelor of Nursing
Recreation Officer  Youth Worker	Diploma of Conservation and Ecosystem Management	Bachelor of Forensic Science/ Criminology
Case Worker		Bachelor of Psychology (Social Science)
		Bachelor of Community and Human Services
		Bachelor of Community Development

### Before finalising units

### Design and Construction Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Carpentry and Joinery
- Pattern Making
- Plumbing
- Metal Founding
- Building Construction
- Technology Design Furniture Technology
- Drafting

### **VCE Course**

English (Units 1-4)

Choose From	Other Suggested Units
Mathematics (Units 1-4)	Business Management
Visual Communication Design (Units 1-4)	Legal Studies
Applied Computing (Units 1-4)	Art - Creative Practice
	Physics

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

### **VET Courses**

Choose From	Other Suggested Units
Certificate II in Building and Construction	Certificate II in Signage and Graphics
Certificate II in Information, Digital Media and Technology	
Certificate II in Furnishing	

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Carpentry	Cert III in Plumbing	Bachelor of Architectural Design
Plumbing	Diploma of Building and	Bachelor of Design
Drafting	Construction (Building)	Bachelor of Engineering (Civil)
Interior Designer Building and Construction	Advanced Diploma of Building Design (Architectural)	Bachelor of Landscape Architectural Design
	Advanced Diploma of Engineering Technology	Bachelor of Building Surveying
	Diploma of Interior Design	Bachelor of Mechanical Engineering/Bachelor of Industrial Design

### Before finalising units

Check prerequisites using the VTAC search tool: www.vtac.edu.au and/or make an appointment with the Careers team.

### Electronic / Electrical Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Electrical
- Engineering

### **VCE** Course

English (Units 1-4)

Choose From	Other Suggested Units
Physics (Units 1–4)	Visual Communication Design
Mathematics (Units 1-4)	Chemistry
Applied Computing (Units 1-4)	Business Management
Systems Engineering (Units 1-4)	

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

### **VET Courses**

Choose From	Other Suggested Units
Certificate II in Electrical	Certificate III Information, Digital Media and Technology
Certificate II in Engineering	- partial completion
Certificate II in Automotive Vocational Preparation	Certificate III in Music Sound Production
Certificate II in Electrotechnology Studies	

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Electrician	Cert IV in Programming	Bachelor of Computer Science
Engineer	Cert IV in Sound Production	Bachelor of Engineering
Network Engineer	Diploma of Screen and Media	Bachelor of Aerospace Engineering
Security System Technician	Advanced Diploma of Engineering	Bachelor of Information
Film and Television Lighting	Technology-Electrical	Technology
Operator	Advanced Diploma of Electronics	Bachelor of Engineering (Electrical)
Electronic designer	and Communications Engineering	
Mechanical Engineer	Advanced Diploma of Engineering (Mechanical)	
Power Systems Engineer		

### Before finalising units

### Graphic Design and Art Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Graphic Design
- Interior Design
- Finished Art
- Printing

- Art/Photography
- Signwriting
- Visual Merchandising
- Fashion Design

### **VCE Course**

English (Units 1-4)

Choose From	Other Suggested Units
Art Creative Practice (Units 1-4)	Business Management
Visual Communication Design (Units 1-4)	
Media (Units 1-4)	
Applied Computing (Units 1-4)	
Mathematics (Units 1-4)	

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

#### **VET Courses**

Choose From	Other Suggested Units
Certificate III in Screen and Media	Certificate II and III in Applied Fashion and Design
Certificate II in Signage and Graphics	Certificate II and III in Picture Framing

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Signwriter	Diploma of Screen and Media	Bachelor of Screen Media
Fashion Designer	Diploma of Digital Media	Bachelor of Fashion Design
Photographer	Technologies	(Honours)
Visual Merchandiser	Diploma of Fashion Styling	Bachelor of Architectural Design
Museum Curator	Certificate IV in Design	Bachelor of Design
Interior Decorator	Associate degree in Fashion	Bachelor of Fashion
intendi Decorator	Design and Technology	
Architect	Diploma of Graphic Design	

### Before finalising units

Check prerequisites using the VTAC search tool: www.vtac.edu.au and/or make an appointment with the Careers team.

## Humanities Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Journalism
- Local Government
- Media Studies
- Librarian
- Language Studies

- Video Production
- Law
- Politics
- Photography

### **VCE** Course

English (Units 1-4)

Choose From	Other Suggested Units
History (Units 1-4)	Psychology
Legal Studies (Units 1-4)	Art - Creative Practices
Art - Creative Practice (Units 1-4)	Visual Communication Design
Geography (Units 1-4)	Mathematics
Philosophy (Units 1–4)	Chinese
Extended Investigation	

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

### **VET Courses**

### Other Suggested Units

Certificate II and III in Community Services

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Politician Photographer Librarian Local Government Historian Journalism	Cert IV in Professional Writing and Editing Diploma of Screen and Media Diploma of Digital Media Technologies Diploma of Media and Communication	Bachelor of Arts  Bachelor of Screen Media  Bachelor of Communication (Journalism)  Bachelor of Communication (Public Relations)  Bachelor of International Studies
Academic Urban Planner	Diploma of Library and Information Services	Bachelor of Global Studies  Bachelor of Politics, Philosophy and Economics

### Before finalising units

### Information Technology Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Computer Programming
- Computer Operator
- Accounting
- Management Communications
- Cybersecurity
- Game Design and Programming

- Data Analyst
- Artificial Intelligence
- Business Information Systems
- Information Technology
- Software Engineering

### **VCE Course**

English (Units 1-4)

Choose From	Other Suggested Units
Applied Computing (Units 1–4)	Visual Communication Design
Mathematics (Units 1-4)	Legal Studies
Physics (Units 1–4)	Psychology
Accounting (Units 1-4)	Business Management
*(some courses require Maths Methods)	

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

#### **VET Courses**

### **Choose From**

Certificate III Information, Digital Media and Technology - partial completion

Certificate II in Electrotechnology Studies

Certificate III Music Sound Production

Certificate III in Screen and Media

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Computer Programmer	Software Development (Diploma)	Bachelor of Computer Science
Data Processor	Diploma of Computing	Bachelor of Engineering
Network Analyst	Certificate III in Enabling	Bachelor of Science/Bachelor of
Games Developer	Technologies	Computer Science
Web Designer/Developer	Certificate IV in Cyber Security	Bachelor of Software Engineering
Systems Administrator	Diploma of Digital Media	Bachelor of Information
Multimedia Developer	Diploma of Game Development	Technology
'	Diploma of Information Technology	Bachelor of Cyber Security
Cybersecurity	Diploma of Information Technology	Bachelor of Data Science
	(Gaming Design)	Bachelor of Artificial Intelligence

### Before finalising units

Check prerequisites using the VTAC search tool: www.vtac.edu.au and/or make an appointment with the Careers team.

### Mathematics and Science / Engineering Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Environmental Science
- Mathematics/Statistics
- Chemistry
- Surveying
- Engineering
- Conservation and Ecosystem

- Physics
- Biology
- Veterinary Science
- Space Science
- Aviation

### **VCE Course**

English (Units 1-4)

Choose From	Other Suggested Units
Mathematics (Units 1–4)	Extended Investigation
Physics (Units 1–4)	
Chemistry (Units 1–4)	
Biology (Units 1–4)	
Systems Engineering (Units 1-4)	
*(some courses require Maths Methods)	
Applied Computing (Units 1-4)	
Psychology	
Environmental Science	
Health and Human Development	

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

### **VET Courses**

Choose From	Other Suggested Units
Certificate III in Laboratory Skills	Certificate III Information, Digital Media and Technology
Certificate II in Engineering	- partial completion
Certificate II in Horticulture	
Certificate III in Music Sound Production	

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Pharmacist Engineer Market Researcher Biochemist Physicist Surveyor Ecologist Environmental Scientist Aerospace Engineer Marine Biologist	Certificate IV in Marketing and Communication Advanced Diploma of Engineering (Aeronautical) Diploma of Bioscience Diploma of Laboratory Technology Diploma of Food Science and Technology Diploma of Horticulture	Bachelor of Engineering Bachelor of Aerospace Engineering Bachelor of Software Engineering Bachelor of Science Bachelor of Applied Science (Surveying) Bachelor of Biomedicine Bachelor of Environmental Management and Sustainability

### Before finalising units

### Medical and Health Science Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Nursing
- Pharmacy
- Paramedicine
- Medicine
- Podiatry

- Medical Administration
- Dentistry
- Physiotherapy
- **Health Promotion**
- Health Science

### **VCE Course**

English (Units 1-4)

Choose Fro	m	Other Suggested Units	
General Math	nematics (Units 1-4)	Physical Education	
Mathematica	ll Methods (Units 1-4)	Health and Human Development	
Specialist Ma	athematics (Units 3-4)	Applied Computing	
Biology (Unit	s 1–4)	Extended Investigation	
Chemistry (U	Inits 1–4)		
Physics (Unit	ts 1–4)		
Psychology (	Units 1-4)		
Mathematica Specialist Ma Biology (Unit Chemistry (U Physics (Unit	al Methods (Units 1–4) athematics (Units 3–4) s 1–4) Inits 1–4)	Health and Human Development Applied Computing	

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

### **VET Courses**

Choose From	Other Suggested Units
Certificate III in Allied Health Assistance	Certificate III in Early Childhood Education
Certificate III in Health Services Assistance	Certificate III in Community Services
	Certificate III in Sports, Aquatics and Recreation

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Nursing	Cert IV in Ageing Support	Bachelor of Nursing
Dentist	Cert IV in Allied Health Assistance	Bachelor of Biomedicine
Doctor	Diploma of Dental Technology	Bachelor of Nursing/Bachelor of
Physiotherapist	Diploma of Food Science and	Paramedicine
Dietitian	Technology	Bachelor of Health Science
Paramedic	Diploma of Remedial Massage	Bachelor of Science (Osteopathy)
Osteopath	Certificate III in Non-Emergency Patient Transport	Bachelor of Biomedical and Exercise Science
Biomedical Scientist	•	Bachelor of Sport Science
Dental Hygienist		(Human Movement)
		Bachelor of Exercise Science

### Before finalising units

### Media and Performing Arts Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Film
- Television
- Radio
- Theatre
- Design
- Graphics Media
- Advertising
- Voice Over Artist

- Newspapers and Magazines
- Teaching Dance
- Arts Administration
- Public Relations
- Journalism and Writing
- Music Industry
- Teaching
- Producer
- Set Manager

### **VCE** Course

English (Units 1-4)

Choose From	Other Suggested Units
Art Creative Practice (Units 1-4)	Physical Education
Visual Communication Design (Units 1-4)	Business Management
Media (Units 1-4)	Extended Investigation
Drama (Units 1-4)	
Music Performance (Units 1-4)	

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement.

### **VET Courses**

Choose From	
Certificate II and III in Acting (Screen)	Certificate III in Screen Media
Certificate II in Dance	Certificate III in Music Performance
Certificate III in Screen Media	Certificate III in Music Sound Production

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Actor	Diploma of Screen and Media	Bachelor of Screen Media
Arts Administrator	Diploma of Graphic Design	Bachelor of Creative Arts (Drama)
Music Critic	Diploma of Information Digital	Bachelor of Design
Film and TV Producer	Media and Technologies	(Animation and Interactive Media)
Sound Technician		Bachelor of Arts (Music Industry)
		Bachelor of Media
		Bachelor of Performing Arts

### Before finalising units

### Planning and Architecture Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Architecture
- Building and Construction
- Surveying
- Urban Studies/Planning
- Drafting

- Senior Strategic Planner
- Planning Compliance Manager
- Town Planner
- **Environmental Planner**

### **VCE Course**

English (Units 1-4)

Choose From	Other Suggested Units
Visual Communication Design (Units 1-4)	Art Creative Practice
Mathematics (Units 1-4)	History
Physics (Units 1-4)	Business Management
Applied Computing (Units 1-4)	Accounting

#### VCE VM Course

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement

### **VET Courses**

### **Choose From**

Certificate II in Building and Construction

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Architect	Diploma of Building and	Bachelor of Architectural Design
Surveyor	Construction (Building)	Bachelor of Design
Town Planner	Advanced Diploma of Engineering (Aeronautical)	Bachelor of Engineering (Civil)
Builder	Advanced Diploma of Building	Bachelor of Building Surveying
Building Surveyor	Design (Architectural)	Bachelor Design/Landscape
Civil Engineer	Certificate IV in Design	Architecture
	Diploma of Landscape Design	Bachelor Design/Urban Planning
	Diploma of Building Design/ Construction Management	Bachelor of Planning (Honours)

### Before finalising units

Check prerequisites using the VTAC search tool: www.vtac.edu.au and/or make an appointment with the Careers team.

### Sport and Recreation Options

These options are designed for students who wish to pursue studies that will lead to employment or further study in the following fields:

- Leisure and Recreation
- Physical Education and Human Movement
- Fitness
- Sports Administration
- Sports Psychology

### **VCE Course**

English (Units 1-4)

Choose From	Other Suggested Units
Physical Education (Units 1-4)	IT Applications
VET: Sport and Recreation (Fitness Focus) (Units 1-4)	Business Management
Health and Human Development (Units 1-4)	Mathematics
Biology (Units 1-4)	Psychology
	Accounting

### **VCE VM Course**

Students undertaking the VCE Vocational Major (VCE VM) should consider the VET courses below and select an appropriate industry specific work placement

### **VET Courses**

### **Choose From**

Certificate III in Sports, Aquatics and Recreation (Fitness Focus)

### **Future Studies**

Employment Outcomes (some suggestions)	TAFE Courses (a sample)	University Degrees (a sample)
Sports Administrator	Diploma of Sport Development	Bachelor of Health Science
Recreation Officer	Advanced Diploma of Sports	Bachelor of Education (P-12)
Sports Coach	Therapy	Bachelor of Exercise and
Park Ranger	Diploma of Sport and Recreation Management	Sport Science
Physical Education Teacher	Certificate IV in Fitness	Bachelor of Outdoor and Environmental Education
Sport and Exercise psychologist		Bachelor of Sport Coaching
		Bachelor of Fitness

### Before finalising units

### Subject Selection

### Making decisions about your senior secondary certificate and subject

When making decisions about their senior secondary certificate and subjects, students should consider their:

- · Career ambitions
- Strengths
- Interests

### Advice for students selecting VCE

In addition to the considerations above, students selecting VCE should also consider possible pre-requisite subjects or other requirements for entry into university courses.

Prerequisites are specific subjects that must be completed to be eligible for a course, because the knowledge and skills from these are required to understand the course's content. Other entrance requirements could include presentation of a folio or an audition. Students should select relevant prerequisite subjects and/or subjects that will enable them to fulfil entrance requirements.

Some students will be unsure about their future career ambitions. These students are encouraged to select subjects that will enable them to keep their options. In addition to English or EAL, select the highest level of Mathematics possible and perhaps develop two groups of subjects that complement each other. For example,

- Accounting and Business Management
- Physical Education and Health & Human Development
- Visual Communication Design and Art Creative Practice

### Advice for students selecting VCE Vocational Major

In the VCE VM, students have the opportunity to focus their learning based on areas of interest through practical based learning activities, VET courses and industry specific work placements.

Students will need to think carefully about their VET selection for Year 11 and 12 as they will be required to find a Structured Work placement aligned with this VET. The Brimbank Cluster VET Student Handbook 2025 provides information about each of the VETs offered.

Students are encouraged to speak with the Careers Team prior to course counselling if they need support in thinking through their decisions.

# Plan well, for these are the major pathways that will take you towards your destination.

Vocational Education and Training Sector	Higher Education
Certificate I	
Certificate II	
Certificate III	
Certificate IV	
Diploma	Diploma
Advanced Diploma	Advanced Diploma
	Bachelor Degree
	Graduate Certificate
	Graduate Diploma
	Masters Degree
	Doctoral Degree
	Training Sector  Certificate I  Certificate III  Certificate IV  Diploma

### Alternative Pathways into University

- Special entry schemes
- · Getting into a low demand campus (country)
- Transferring from a lower ATAR degree
- Transferring from TAFE

### The ATAR (VCE Only)

The ATAR is an overall percentile ranking reflecting a students' comparative performance amongst the relevant age group in a given year. A student's ATAR is developed from an aggregate produced by adding the primary four subjects (English and the next best three subject scores) plus 10% of a 5th and 6th subject.

### Where to find more information

- Victoria University Secondary College Careers Centre
- **VTAC CourseSearch** is an online tool for researching tertiary study options. It is available on the VTAC website.
- **The Good Careers Guide**
- University and TAFE websites
- Victorian Skill Gateway

Notes	

Notes





# Victoria University Secondary College

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#### **Senior Campus**

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