### **SUBJECT HANDBOOK**





### Introduction

'To Believe, To Think, To Achieve'. At Bayview College we believe education is an holistic experience, engaging all aspects of the students being. We believe every student is a unique individual who learns in their own way, in their own time. Our curriculum aims to reflect this, offering students a breadth of experiences while allowing sufficient time and space to engage deeply in the course content. In this handbook you will find a wealth of information about the curriculum we offer and how it is structured to allow students the ability to extend or consolidate their knowledge as required.

### Curriculum Years 7, 8, 9 and 10

All Bayview College students have access to the key learning areas of English, Faith & Values, Mathematics, Humanities, Science, Health & Physical Education, Technology, Visual & Performing Arts and LOTE: Japanese during the Years 7-10 learning program. Year 7 has a prescribed approach to learning areas whereby all students study all areas to ensure a breadth of learning is achieved. In Year 8 the level of flexibility increases as students begin to refine their interests and make elective choices. From Year 9, students have the option to study a 'Pre-VCE' subject to prepare them for accelerated VCE in Year 10.

All Bayview College students from Years 7-10 students develop a Personal Learning Program (PLP) with a mentor teacher and their parents/guardians. These plans encourage students to look ahead in their educational journey to carefully map out the areas they wish to study to broaden their vocational horizons and extend personal interests. Subjects offered at Bayview College provide strong foundations for further study, vocation studies or work. From Year 8, students can choose to continue their study of Japanese as their LOTE. Students who continue their LOTE studies into the Senior Years could participate in an exchange program to Japan and distinct advantages in VCE.

At Years 8, 9 and 10, students begin to specialise and can pursue their passions by selecting elective subjects from within the Visual and Performing Arts, Food Technology, Information Technology, Health and Physical Education, Humanities, and Science learning areas.

Students who have demonstrated a strong work ethic and consistent academic progress can elect to work at an advanced level and begin VCE studies whilst in Year 10 or commence TAFE studies. Students who take this option have the capacity to broaden their choices for future study.

In Year 11 and 12, students select from a broad range of VCE studies. Students can also choose to undertake VCE Vocational Major (VCE VM) studies or a School Based Apprenticeship as part of their academic program.

At Bayview College we believe that learning is a fulfilling and life-long process. It is enhanced and nurtured by:

- Interaction with parents
- Respect and friendship between students and teachers
- An acceptance that each student is an individual
- Opportunities for parents to contribute to the learning process.
- Caring, motivated, skilled, and qualified teachers
- Systematic monitoring and regular reporting of student progress
- A contribution to the community outside the academic program

### Bayview College 7-10 Curriculum Map

YEAR 7									
English	Maths	<b>WAVE</b> Program	Faith & Values	LOTE Japanese	Humanities	Science	Physical Education	<b>Arts &amp; Tec</b> Performing Arts Food Technology Digital Design	h <b>nologies</b> Textiles Wood Technology Visual Art & Design

• All subjects are compulsory for Year 7 to ensure a breadth of learning experiences is achieved.

YEAR 8								
English	Maths	<b>ANCHOR</b> Program	Faith & Values	Humanities / LOTE Japanese	Science	Physical Education	<b>Elective Subjects</b> 2 per semester = 4 per year	

• Students may continue studying Languages: Japanese but do so in place of Humanities. This is on the condition that a Humanities elective is chosen from the electives program.

YEAR 9						
English	Maths	<b>CIRCLE</b> Program	Faith & Values	<b>Elective Subjects</b> 4 per semester = 8 per year (VCE / VM Subjects are full year = 2 semesters equivalent)		

• Students are strongly advised to choose one semester from each learning area to maintain a breadth of learning experiences.

• 'Pre-VCE' electives advised for students wishing to accelerate into VCE Unit 1 & 2 subjects during Year 10.

YEAR 10						
English	Maths	<b>HORIZON</b> Program	VCE Religion & Society	<b>Elective Subjects</b> 4 per semester = 8 per year (VCE/VM Subjects are full year = 2 semesters equivalent)		

• Students are encouraged to choose 'Pre-VCE' electives during Year 10 or take on a Unit 1 & 2 VCE subject

### Year 7, 8, 9 and 10 Core Subjects

Core subjects are undertaken by <u>all</u> students in Year's 7-10 and form the basis of Bayview College Curriculum. The Bayview College 'Core' is broken into three levels: Years 7 (Breadth), Year 8 (Breadth and Pathways) and Years 9 and 10 (Pathways). The Year 7 and 8 Core includes the learning areas of English, Mathematics, Humanities, Physical Education, LOTE and Science and Arts & Technology. At Year 8, to allow students additional time for extending their learning in areas of passion, LOTE, Arts/Technology and additional Humanities become part of the electives program. The Years 9 and 10 Core includes English and Mathematics to ensure a strong foundation in Literacy and Numeracy is maintained while Faith & Values and the Flagship Program ensure a well-rounded approach to personal development is followed. All other learning areas are offered through the electives program and are chosen as part of the Personal Learning Plan.

### Arts & Technology – Year 7

#### **Digital Design**

This subject is designed to expose students to a range of learning areas involving digital design and technological implementation. Students learn how to form a design brief, develop a project plan and deliver a finished product. Information and Computer Technology capabilities are embedded throughout this course. Within this course, students will develop a basic understanding of app and web design and explore digital production and cybersecurity. This subject will lead into other tech related subjects in the Year 8, 9 and 10 elective programs, such as Game Design and Robotics. App and web design are upcoming new industries that present today's young people with exciting new employment prospects.

#### Food Technology

The purpose of the course is to introduce beginner cooks to a kitchen where they can work safely, hygienically, logically, and confidently. Students develop an understanding of kitchen routines and procedures, hygiene in the kitchen, use of kitchen equipment, measuring accurately, following a recipe, simple food nutrition – why we eat food, the dietary pyramid, analysis of eating patterns and preparation of foods from each of the 5 food groups using a variety of skills.

#### **Performing Arts**

This specialist subject introduces students to the Performing Arts which is a fusion of Drama, Dance and Music. Students will develop confidence and skills in the basic elements of performance. The course engages students in a variety of units which exemplify creativity, original thought and working with stimulus. Students will study the language of the Performing Arts and understand how to use that language during the analysis and creating processes. Students will be competent in creating and performing both scripted and improvised work, working in both small groups and as individuals.

#### Product Design and Technology (Wood)

This course is an introduction to basic carpentry skills for Year 7 students. It commences with tuition about safety and workshop expectations for the students' first Design and Technology subject. Students are taught about the use and purpose of hand tools, mechanised tools and equipment while building a timber model. Such models could include a small chest of drawers, a custom designed clock, a tea tray, a pen and pencil holder, a timber storage unit. They are instructed on the setting out, measuring, building, assembling, and finishing techniques required to complete such wooden projects. Scope is also provided for the attainment of design and drawing skills. Product Design and Technology (Wood) allows students to acquire manual competence and is suited to brand new woodworkers, as well as those with experience.

#### **Textiles Design**

This unit introduces students to Textiles and Textile articles, develops confidence and skill in the use of materials, tools, and equipment. The course encourages creatively in using the design process in the construction of textile articles, developing good construction skills and techniques and encourages thorough and effective workbook skills. Students complete an introduction to machine safety, care, and use, experimenting with stitches, designing, pattern making, trialling, recording decisions and following an instruction sheet for the construction of products.

#### Visual Art & Design

Students will experience a range of activities that will enhance their knowledge and skills of a variety of art and design forms, materials, methods, and media. The activities provide opportunities for exploration and resolution of ideas in the visual form. It will encourage independent content to become the focus of study and individual styles and appropriate media and methods to be employed. Students will be encouraged to talk and write about their work and that of other artists and designers.

### English

The Victorian Curriculum aims to ensure that students:

- learn to listen to, read, view, speak, write, create, and reflect on increasingly complex and sophisticated spoken, written, and multimodal texts across a growing range of contexts with accuracy, fluency, and purpose.
- appreciate, enjoy, and use the English language in all its variations and develop a sense of its richness and power to evoke feelings, convey information, form ideas, facilitate interaction with others, entertain, persuade, and argue.
- understand how Standard Australian English works in its spoken and written forms and in combination with non-linguistic forms of communication to create meaning.
- develop interest and skills in inquiring into the aesthetic aspects of texts and develop an informed appreciation of literature.

The English curriculum is built around the three interrelated strands of language, literature, and literacy. Teaching and learning programs should balance and integrate all three strands. Together, the strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking, writing, and creating. Learning in English builds on concepts, skills and processes developed in earlier years, and teachers will revisit and strengthen these as needed.

#### Year 7 and 8

Students interact with peers, teachers, groups, and community members in a range of face-toface and online/virtual environments. They experience learning in both familiar and unfamiliar contexts that relate to the school curriculum, local community, regional and global contexts.

Literary texts that support and extend students in Years 7 and 8 as independent readers are drawn from a range of realistic, fantasy, speculative fiction and historical genres and involve some challenging and unpredictable plot sequences and a range of non-stereotypical characters. These texts explore themes of interpersonal relationships and ethical dilemmas within real-world and fictional settings and represent a variety of perspectives. Informative texts present technical and content information from various sources about specialised topics. Text structures are more complex including chapters, headings and subheadings, tables of contents, indexes, and glossaries. Language features include successive complex sentences with embedded clauses, unfamiliar technical vocabulary, figurative and rhetorical language, and information supported by various types of graphics. Students create a range of imaginative, informative, and persuasive types of texts, for example narratives, procedures, performances, reports, and discussions, and continue to create literary analyses and transformations of texts.

#### Year 9 and 10

Students engage with a variety of texts in order to develop an appreciation of different styles, purposes and contexts. They interpret, create, evaluate, discuss and perform a wide range of literary texts that are designed to develop a breadth of knowledge in all aspects of language and literature. Students engage with various types of texts, including newspapers, film and digital texts, fiction, non-fiction, poetry, dramatic performances and multimodal texts, with themes and issues involving levels of abstraction, higher order reasoning and intertextual references. Students develop the ability to critically analyse all forms of texts.

The range of literary texts comprises Australian literature, from both contemporary and indigenous texts. Literary texts that support and extend students in Years 9 and 10 as independent readers are drawn from a range of genres and involve complex, challenging and unpredictable plot sequences and hybrid structures that may serve multiple purposes. Students create a range of imaginative, informative and persuasive types of texts including narratives, performances, reports, discussions, literary analyses, transformations of texts and reviews.

#### The Victorian Pathway Certificate: Literacy - Year 10

Students who have a learning need and career pathway which includes the VCE VM Literacy in Years 11 and 12, will be offered the opportunity, with the consultation of the Inclusion team and English Department to select this course.

VPC Literacy enables the development of knowledge, skills, and capabilities relevant to reading, writing and oral communication and their practical application in the contexts of everyday life, family, employment, further learning, and community. This study provides students with the key skills and knowledge to interpret and create texts with appropriateness, accuracy, confidence, and fluency, as well as for learning in and out of school, and for participating in the workplace and community.

Units 1 and 2 will cover literacy for Personal use, Understanding and creating digital texts, Exploring, and understanding issues and voices, and Informed discussion.

### Faith and Values

#### Year 7 and 8

Students are encouraged throughout the Faith and Values program to consider the role that faith has in people's lives. By developing an understanding of Christian traditions, an appreciation of other faith perspectives and knowledge of the rituals associated with religion, students develop a deeper understanding of the human story. In Year 7 the focus is on Bayview history, exploring the Christian faith, the life and example of Jesus and the traditional Christian celebrations such as Lent, Easter, Advent, and Christmas. In Year 8 Students explore the bible, Old Testament people and events, the New Testament and the Christian celebrations of Easter and Christmas.

#### Year 9

Students will build upon their previous knowledge by exploring the Apostles Creed as a basis for Christian belief. They will study Christian values in relationship to a Biblical Worldview as well who Jesus is and how he influenced church history. They will further explore Christianity through biblical themes and practical applications.

#### Year 10

#### VCE Religion and Society Unit 2: Ethics and Morality

Today religious and philosophical traditions compete with powerful alternative sources of moral values represented in the media and popular culture. Nevertheless, society still relies on cultural heritages that contain a variety of ethical perspectives as well as numerous values centred on human dignity and basic justice. In this unit students survey various approaches to ethical decision-making and then explore how religious traditions impact our decision making. They explore contemporary ethical issues in the light of their investigations into ethical decision-making and moral viewpoints in religious traditions.

#### Areas of study

- 1. Ethical decision-making and moral judgement
- 2. Religion and ethics
- 3. Ethical issues

### Wellbeing Program



Bayview College offers students a unique wellbeing program based upon the College Crest. These programs focus on the unique stage of development the students are in and incorporate a range of learning activities, experiences, and opportunities. Students are assured of more positive academic outcomes when they develop resilience, personal and interpersonal skills.

#### YEAR 7: WAVE

The **WAVE** Program covers skills that are required to successfully transition from primary to secondary school; organisation, building positive relationships, resilience and at home study skills are the key focus.

A significant component of the WAVE Program is the Deep Dive Investigation. This project encourages critical and creative thinking by allowing students to explore topics of interest in depth. The Deep Dive Investigation is designed to:

**Develop Critical and Creative Thinking**: Students will engage in research and inquiry, fostering analytical skills and creativity as they explore their chosen topics.

- **Promote Independent and Group Work**: Students will have opportunities to work independently and collaboratively, enhancing their ability to manage projects on their own as well as contribute effectively to group efforts.
- Focus on Student-Driven Learning: The program encourages students to take charge of their learning journey. They will set goals, plan their investigations, and present their findings, thereby cultivating a sense of ownership and motivation.

#### YEAR 8: ANCHOR

The **ANCHOR** program for year 8 provides an opportunity for students to develop teamwork and a social consciousness by the development and delivery of projects within the broader community. Students will develop an understanding of their place in the community whilst creating and sustaining positive relationships. Year 8 students also undertake Mental Health First Aid training.

#### YEAR 9: CIRCLE

The **CIRCLE** program for year 9 combines wellbeing and aspects of Health Education. Students are required to work in teams, dealing with real world problems, as they develop a stronger sense of self-worth and an understanding of their capacity to contribute to building a better world. As part of the Circle program students undertake Project Wayfinder as well as various school and community-based projects.

#### YEAR 10, & VCE/VM: HORIZONS

The **HORIZONS** program, Years 10 – 12, is focussed on preparation for the world beyond school: Morrisby Vocational Test and subsequent vocational education, work experience, TAFE and University visits, leadership development, and exposure to a range of careers and training practitioners. In addition, students re-visit Mental Health First Aid through a series of workshops and undertake preparation for the Senior Years Camps program.

### Health & Physical Education

#### Years 7 & 8

The Level 7 and 8 curriculum expands students' knowledge, understanding and skills to help them achieve successful outcomes in classroom, leisure, social, movement and online situations. Students learn how to take positive action to enhance their own and others' health, safety and wellbeing. They do this as they examine the nature of their relationships and other factors that influence people's beliefs, attitudes, opportunities, decisions, behaviours and actions. Students demonstrate a range of help-seeking strategies that support them to access and evaluate health and physical activity information and services.

The curriculum for Level 7 and 8 supports students to refine a range of specialised knowledge, understanding and skills in relation to their health, safety, wellbeing, and movement competence and confidence. They develop specialised movement skills and understanding in a range of physical activity settings. They analyse how body control and coordination influence movement composition and performance and learn to transfer movement skills and concepts to a variety of physical activities. Students explore the role that games and sports, outdoor recreation, lifelong physical activities, and rhythmic and expressive movement activities play in shaping cultures and identities. They reflect on and refine personal and social skills as they participate in a range of physical activities.

The focus areas to be addressed in Level 7 and 8 include, but are not limited to:

- alcohol and other drugs
- food and nutrition
- health benefits of physical activity
- mental health and wellbeing
- relationships and sexuality
- safety
- challenge and adventure activities
- games and sports
- lifelong physical activities
- rhythmic and expressive movement activities

### Humanities

Humanities at Year 7 and 8 level comprises four key learning areas: Civics and Citizenship, Economics and Business, Geography and History.

#### **Civics & Citizenship**

The **Year 7** curriculum provides a study of the key features of Australia's system of government and explores how this system aims to protect all Australians. Students examine the Australian Constitution and how its features, principles, and values shape Australia's democracy. They look at how the rights of individuals are protected through the justice system.

The **Year 8** curriculum provides a study of the responsibilities and freedoms of citizens and how Australians can actively participate in their democracy. Students consider how laws are made, and the types of laws used in Australia.

#### **Economics & Business**

The **Year 7** curriculum gives students the opportunity to further develop their understanding of economics and business concepts by exploring what it means to be a consumer, a worker and a producer in the market, and the relationships between these groups. Students explore the characteristics of successful businesses and consider how entrepreneurial behaviour contributes to business success.

The **Year 8** curriculum gives students the opportunity to further develop their understanding of economics and business concepts by exploring the ways markets – including traditional Aboriginal and Torres Strait Islander markets – work within Australia, the participants in the market system and the ways they may influence the market's operation. The rights, responsibilities and opportunities that arise for businesses, consumers and governments are considered along with the influences on the ways individuals work now and into the future.

#### Geography

There are two units of study in the **Year 7** curriculum for Geography: 'Water in the world' and 'Place and liveability'.

'Water in the world' focuses on water as an example of a renewable environmental resource. This unit examines the many uses of water, the ways it is perceived and valued, its different forms as a resource, the ways it connects places as it moves through the environment, its varying availability in time and across space, and its scarcity.

'Place and liveability' focus on the concept of place through an investigation of liveability. This unit examines factors that influence liveability and how it is perceived, the idea that places provide us with the services and facilities needed to support and enhance our lives, and that spaces are planned and managed by people.

There are two units of study in the **Year 8** curriculum for Geography: 'Landforms and landscapes' and 'Changing nations.'

'Landforms and landscapes' focus on investigating geomorphology through a study of landscapes and their landforms. This unit examines the processes that shape individual landforms, the values and meanings placed on landforms and landscapes by diverse cultures, hazards associated with landscapes, and management of landscapes.

'Changing nations' investigates the changing human geography of countries, as revealed by shifts in population distribution. The spatial distribution of population is a sensitive indicator of economic and social change, and has significant environmental, economic, and social effects, both negative and positive.

#### History

The **Year 7** curriculum provides a study of history from the time of the earliest human communities to the end of the ancient period, approximately  $60\ 000\ BC\ (BCE) - c.650\ AD\ (CE)$ . It was a period defined by the development of cultural practices and organised societies. The study of the ancient world includes the discoveries (the remains of the past and what we know) and the mysteries (what we do not know) about this period of history, with a particular focus on society in Egypt.

The **Year 8** curriculum provides a study of history from the end of the ancient period to the beginning of the modern period, c.650–1750 AD (CE). This was when major civilisations around the world encountered each other. Social, economic, religious and political beliefs were often challenged and significantly changed. It was the period when the modern world began to take shape.

### Languages: Japanese

#### Year 7 & 8

The Year 7 Japanese course introduces the structure of the Japanese language and its writing system. Students begin to learn to read and reproduce the Hiragana alphabet and are introduced to some Kanji and Katakana characters. The focus is learning to speak about themselves, friends and family in simple sentences. They will explore Japan and make comparisons between everyday aspects of Japanese and Australian life and etiquette. Working throughout their "iiTomo" activity book, in conjunction with the accompanying student book, students will undertake reading, writing, listening and speaking activities.

The **Year 8 Japanese** course focuses upon students learning to communicate about their everyday lives including topics such as school life, transport, hobbies and sports, and special occasions. Students learn to discuss their daily routine activities using time and days of the week. They also learn to discuss their school life, including their timetable and talking about what subjects they like and dislike. Working throughout their "iiTomo" activity book, in conjunction with the accompanying student book, students will undertake reading, writing, listening and speaking activities.

### Mathematics

Using the **Maths Pathway** model, Middle School Mathematics aims to ensure that students:

- are confident, creative users and communicators of mathematics.
- can investigate, represent, and interpret situations in their personal and work lives and as active citizens.
- develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes and can pose and solve problems.
- recognize connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.

Mathematics is organised around the interaction of three content strands and four proficiency strands. The content strands are Number and Algebra, Measurement and Geometry, and Statistics and Probability.

Each student has a fully individualized learning plan based on diagnostic assessments and previous work completed. As students learn, they demonstrate growth along a personal continuum via fully differentiated work and assessments. This covers all areas of the curriculum at all levels.

The **Maths Pathway** learning model involves 3 types of lessons:

**Module lessons**: Students complete written work and formal assessments in a fully differentiated manner, while teachers work with small groups and individuals on feedback, intervention, and explicit instruction.

**Rich lessons**: Students work collaboratively to develop key concepts and problem-solving skills in mathematics, while teachers lead and direct the lesson. Rich lessons have multiple entrance and exit points to make them accessible for all students and encourage mathematical discourse and critical thinking.

**Project lessons**: Students work in groups or individually on an extended project to develop key concepts and problem-solving skills in mathematics. These lessons also include explicit teaching of key content and skills.

#### Year 8 and Mathematics Courses

In Years 8 and 9, students will engage in the Maths Pathway Flex program. This program involves explicit teaching of mathematical subjects across the three strands: Number and Algebra, Measurement and Geometry, and Statistics and Probability. They will then use the Maths Pathway program to complete modules and tasks that are appropriate to their skills, knowledge, and confidence level.

#### Year 10 Mathematics Courses

In Year 10, students select the mathematics pathway that best fits their learning needs and aspirations (Pre-VCE Mathematics or VM Numeracy - Foundation), students work on selected content across the three strands: Number and Algebra, Measurement and Geometry, and Statistics and Probability.

- 1. **Pre-VCE Mathematics Methods** prepares students for any VCE mathematics course, specifically Year 11 Mathematical Methods, where students will undergo formal assessment in both Technology free and Technology enabled examinations. Students who may need more advanced Maths study as a prerequisite for further study would choose to follow this pathway.
- 2. Pre-VCE Mathematics General prepares students specifically for the VCE subject of General Mathematics as well as VM Numeracy. The aim is to consolidate Numeracy skills and prepare for General Maths by working on targeted topics of the year 10 curriculum. Students who undertake this subject can select General Mathematics but need to be aware that Pre-VCE Methods is a pre-requisite subject for Unit 1 Math Methods.

Victorian Pathways Certificate Numeracy - Year 10 is designed for students who have a learning need and career pathway for VCE VM Numeracy in Years 11 and 12. The purpose of the VPC Numeracy course is to enable students to develop everyday numeracy practices that will help them make sense of their personal, public, and future vocational life. The aim is to develop the foundational mathematical skills that considers their interests, the community and vocational context.

The following numeracies are introduced: Personal, Financial, Civic, Health and Recreation. The skills include Shape, Number, Graphs, Measurement.

These will be applied to tasks that are part of the student's everyday life experience. Students will be selected for this course by the Inclusion team in consultation with the Maths Department.

**Note:** In addition to the scheduled 9 periods per fortnight of Mathematics classes, an additional optional tutorial time is available on Wednesday 3:30 – 4:30 pm (Period 7).

### Science

#### Year 7 & 8

Year 7 and 8 Science introduces students to the scientific method of investigation and reporting. It focuses on building the foundation knowledge and practical skills required to study biology, physics, psychology, chemistry, and earth sciences in later years of schooling. Students will learn to work safely and effectively in the laboratory. They will begin to analyse and interpret data and to write scientific reports in the correct format. Thinking and problem-solving skills will be taught and used throughout the topics studied. Information technology will be integrated into the classroom, with activities and assessment being presented in many forms.

#### Topics to be studied include:

#### Year 7

Year 8

- Being a Scientist •
- Solids, Liquids and Gases •
- Light •
- Mixtures
- Forces and Motion •
- Simple Machines
- Classification, Habitats, and Interaction •

- Working with Scientific Data •
- Energy •
- Sound •
- Physical and Chemical change •
- Elements, Mixtures and Compounds •
- Cells
- Living Systems •

### Year 8, 9 and 10 Electives for 2025

### Health & Physical Education

Let's Get Physical Pre-VCE PE: Higher Faster Stronger Pre-VCE Health: Doctor Worldwide First Aid Pre-VCE: Outdoor Ed & Environment – Land Surf Life Saving Sport Nation

#### **Humanities**

Pre-VCE History History of the Holocaust Law and Order Politics Movement of People War and Revolution Indigenous Studies Money, Work and Me School of Thought The Big Question Mapwork and Orienteering

### Science, Tech, Engineering & Maths (STEM) Robotics

Game Design Science Understanding and Practice Marine Science Adaptations and Survival Infinite Possibilities - Exploring Maths Pre-VCE Biology Pre-VCE Chemistry Pre-VCE Physics Pre-VCE Psychology

#### Product & Digital Technology

Food Technology: Bake House Food Technology: Mystery Box Food Technology: The 'Saucery' of Cooking Textiles: Wearable Art Textiles: Fashion & Design Textiles: Fashion & Design Textiles: Fashion Styles & merchandise Design Technology: Bedroom Cabinet Design Technology: Coffee Table Design Technology: Tool Up! Pre-VCE PDT (Textiles)\* Pre-VCE PDT (Wood)\*

#### Visual & Performing Arts

Performing Arts: Fusion Acting & Action Rock Band 2D Studies: Photography, Painting & Printmaking 3D Studies: Ceramics & Sculpture Buildings & Architecture Visual Communication Design: Industrial Design (Objects) Pre-VCE Art: Making & Exhibiting

### Language & Literature

Literature Creative Writing Journalism

Year 9 Japanese – offered every year Year 10 Japanese – offered every year Extension Japanese

### **Integrated Studies**

The Business Lounge Be Resourceful Criminal Forensics Media

**NOTE:** Look through a Subject Handbook from previous years and you will find many more subjects to be offered again in future years. The Bayview College electives offer a world of opportunity.

### Health, Outdoor & Physical Education

#### **Sport Nation**

Come on Aussie, Come On! Australians love sport and, as a nation, we have had much success in many sporting arenas. In this mostly practical elective, students will participate in a variety of popular Aussie sports and outdoor recreation, including Indigenous sports and cultural games. Students will investigate factors which have influenced Australia's sporting culture. Theoretical components of the subject explore the history of sport in Australia and how attitudes and involvement in sport and physical activity have changed over time. Students will undertake a major investigation into an Australian sports issue, event or icon and present their findings to the class and develop an in-house sporting competition that contributes to the Bayview College house points system.

#### Learning Outcomes:

On completion of this unit students should be able to:

- Investigate the varied perspectives held by Australians on sport.
- Examine how diversity is represented in the sports Australians play.
- Explore the impact of media messages associated with physical activity, outdoor recreation and sport in Australia.
- Learn practical skills in sport and event management to develop a sports competition.

<u>VCE Pathway:</u> This elective will provide valuable skills and knowledge for VCE Physical Education, VCE Health, VCE Vocational Major Subjects, VCE Geography and History.

#### Let's Get Physical

A common phrase among some active students is "We just want PE!". This active and hands-on module does just that. Students will explore units such as Life Long Physical Activity, Games & Sports, Rhythmic & Expressive Movement, and Challenge & Adventure Activity. Activities will utilise the local land and water-based recreational sport facilities at Bayview College and around Portland. The module examines competitive and non-competitive recreation and physical activity and the factors that affect participation in them.

#### Learning Outcomes:

On completion of this unit students should be able to:

- Participate in a variety of games and sports units utilising the major fundamental motor skills.
- Investigate and participate in a range of competitive and non-competitive recreation, sport and physical activity.
- Participate in activities that extend one's comfort zone through adventure challenges.
- Analyse factors that influence participation in physical activity across different demographics and the lifespan.

<u>VCE Pathway:</u> This elective will provide valuable skills and knowledge for VCE Physical Education. Practical skills will also be of value for those students undertaking the VCE Vocational Major

#### Pre VCE PE - Higher Faster Stronger

In this fast-paced pre-VCE elective, students will explore the lengths athletes and professional sports people go to in order to reach the top through theoretical and practical activities. These include sports psychology, training programs for different sports, coaching, nutrition and food sciences, preparing meals and meal plans based on the different nutritional needs of different sports, genetics and body types, to biomechanics and the investigations of materials used in

different sporting equipment and the scientific principles behind them, and legal and illegal methods of performance enhancement. Students will also explore the issues and ethics of performance enhancement methods and the labelling of professional athletes as heroes. This elective demonstrates how physical education links in with all the other learning areas including science, humanities and technology.

#### Learning Outcomes:

On completion of this unit students should be able to:

- Participate in practical activities including physical activity, biomechanics labs, food preparation and scientific investigations.
- Analyse health, movement, personal and social factors that affect performance outcomes.
- Examine issues and ethics in sporting pursuits.

<u>VCE Pathway:</u> This elective will provide valuable skills and knowledge for VCE Physical Education, VCE Health, VCE Psychology, VCE Physics, VCE Biology and VCAL Personal Development Skills.

#### Pre-VCE: Outdoor Education & Environment - Land

The Outdoor education course provides an indication of the theoretical and practical requirements for Year 11 and Year 12 Outdoor Education and focuses on practical context such as Group challenges, Hiking, Cooking, Roping, Mountain Biking, Campcraft & Navigation and Sandboarding. Furthermore, the theory components within the course cover a variety of other curriculum areas in the school and this is what makes Outdoor Education so valuable for any student's future career aspirations and skill set. Theory topics include Environmental Awareness; Sustainability; Weather components and understanding weather systems; Navigation; Leadership Development; Group Dynamics; and Trip Planning. Students will participate in a flexible program that includes use of local facilities and equipment with the most current safety and personal protective equipment standards applied. All activities contain some form of controlled risk to maximise opportunities for students to be their best. Students are expected to be available for a two-day camp later in the semester. It is expected that students selecting this elective will bring a mountain bike and helmet to practical classes in the Mountain Bike unit.

#### Learning Outcomes:

On completion of this unit students should be able to:

- A greater awareness and understanding of the outdoors and the impact people have on the environment
- Competence in outdoor pursuits such as cycling and mountain biking, sand boarding, surfing, abseiling, hiking, compass work
- Understanding of basic bush-craft skills
- Proficiency in combining both theoretical and practical aspects of subject content

<u>VCE Pathways:</u> This course provides students with the opportunity to develop their skills and knowledge in preparation for VCE Outdoor & Environmental Studies and VCE Geography

#### Surf Life Saving

In partnership with the Portland Surf Life Saving Club, Bayview College offers students the opportunity to gain the Surf Life Saving Bronze Medallion and become a volunteer surf life saver. Two of our teachers are surf lifesaving trainers and/or assessors, allowing a unique opportunity to be able to gain this award through the school curriculum. Students will spend a lot of time in the water and become proficient in surf lifesaving skills including swimming and board riding, rescue techniques, resuscitation and first aid skills, communication techniques, and aquatic community safety and management. Theoretical components include a study of

human body systems, marine environments and organisms, and injury and illness management. It provides students with an opportunity to become involved with a respected volunteer community organisation, the Portland Surf Life Saving Club, Emergency Management Victoria and the wider Surf Life Saving Australia movement. Students will also have an opportunity to explore other vital volunteer organisations such as the SES, CFA & Coastguard and how these volunteer organisations work together in the community.

#### Learning Outcomes:

On completion of this unit students should be able to demonstrate:

- Apply surf awareness and aquatic rescue skills
- Work effectively in a team and use appropriate communication methods and techniques
- Work effectively in a public safety organisation, following defined OHS procedures
- Gain transferable first aid certificates, including CPR and basic emergency life support
- Become a volunteer patrolling member of the Portland Surf Life Saving Club

<u>VCE Pathways:</u> This elective provides valuable skills in VCE Physical Education, VCE Health, VCE Biology, VCE Outdoor Education, VCE Geography, and VCE Vocational Major pathways

#### Pre-VCE Health – Doctor Worldwide

Let's go on a virtual trip around the world. By taking a 'walk in their shoes' this elective explores what health means to different populations around the world, and to compare the health of Australians to that of other countries. Focus will be placed on the human lifespan, pregnancy and infant health, early childhood development, family structures and parenting in different countries. Real life examples will focus on global health events, global health promotion and the role of organisations such as the World Health Organisation. While working our way around the world we will explore practical ways in which we can become involved in making a difference and the role of aid programs.

#### Learning Outcomes:

On completion of this unit students should be able to demonstrate:

- Have a greater awareness of the challenges faced in achieving equality in health on a global scale.
- Gain knowledge on the human lifespan and evaluate how pre-natal health and childhood development differs around the world.
- Learn how they can be a part of making a difference in closing the gap in health status between developed and developing countries.

<u>VCE Pathway:</u> This elective will provide valuable skills and knowledge for VCE Health & Human Development and Geography. Practical skills will also be of value for those students undertaking the VCE Vocational Major.

#### First Aid

Gain the confidence and skills to respond to a first aid emergency. Through the interactive topic of First Aid, students will investigate a variety of ailments and injuries, and how they affect the structure and function of various body systems. Students will explore the management of diabetes, epilepsy, heart and respiratory conditions, head and spinal injuries, allergies, Musculo-skeletal injuries, envenomation from bites and stings, burns and bleeds using CPR and first aid techniques. As part of recognising and responding to an emergency, students will identify and assess risk and hazard to self and others. As part of this elective, the school will arrange a Level II First Aid course through an external provider. Please note that due to the increasing cost of Level II First Aid courses there will be a family contribution up to but not exceeding \$150.

Learning Outcomes:

- Understand the structure and function of body systems
- Investigate several health issues and how they impact function of body systems
- Identify injury mechanisms and ways to reduce likelihood of injuries occurring
- Recognise an emergency and identify and assess immediate hazards to self and others
- Response to emergency situations using the DRSABCD model.
- Participate in simulated first aid scenarios.

<u>VCE Pathway:</u> This elective will provide valuable skills and knowledge for VCE Health & Human Development, VCE Biology & VCE Physical Education. Practical skills will also be of value for those students undertaking the VCE Vocational Major

### Humanities

#### **Pre-VCE History**

This elective provides a comprehensive exploration of significant historical events, movements, and individuals from ancient to modern times. It covers topics such as revolutions, world wars, and Australian history, emphasizing the development of critical thinking, research, and analytical skills. Students will learn to analyze historical sources, understand cause and effect, and evaluate different perspectives.

Pathways: This course provides links to VCE History and Politics

#### History of the Holocaust

The Holocaust is one of the most horrific events to happen in the modern world. Students will look at historical sources and personal testimony to gain an understanding of the mass genocide and the events that led to it. Students will focus on testimony as safe way of engaging with a topic that can be confronting but ultimately has crucial themes of humanity and resistance; encouraging them to become more global citizens. Students will analyse life in Europe pre-war, the implementation of the Nazi Regime, life in the ghettos and camp and finally what happened after Liberation. They will be responsible for the planning and organisation of the annual Holocaust Remembrance Ceremony.

Pathways: This course provides links to VCE History and Politics

#### Law and Order

As the name would suggest, this elective is focussed on navigating our legal system. Students explore their place in a diverse global community. Students learn about Australia's legal and democratic processes and their rights before the law. Students will examine a range of challenges that Australian's face in the global community and their impacts on local issues. They will evaluate a range of factors that influence their ability to be active and informed citizens in today's modern society.

Pathways: This course provides links to VCE Legal Studies and Politics

#### **Politics**

In this elective, students will explore the Political world around them. They will look at the concepts of governance, citizenship and social responsibility and will compare the many different political modelling that make up our world. They will also dive into faction groups and minority groups and how they navigate our social, legal and political systems. This would be a great elective for those

considering a Legal Studies pathway in VCE or who just have ambitions to be a future Prime Minister!

Pathways: This course provides links to VCE Legal Studies, History and Politics

#### **Movement of People**

In this elective, students will study Migration and Settlement throughout history. It, therefore, covers Subject areas such as History, Geography, Sociology and Economics. Students will explore the reasons for migration such as wars and social upheaval and will discover the short- and long-term implications of these shifts. They will also look at the cultures of those people who had trouble finding a "home".

Pathways: This course provides links to VCE Geography and History

#### War and Revolution

Students will be introduced to a range of turning points in History from 1500 to the present day. They will investigate key wars and revolutions that changed the world forever. This will include the turmoil caused by King Henry VIII and his six wives, the French Revolution and American Civil War and the end of Slavery. Moving into the 20th Century, students will look at how the tensions between the Americans and the Russians infected every conflict, disagreement or competition from the 1940s onwards. Students will also be given a chance to complete a major research inquiry project that they will help develop into any major war, revolution or key change that took place between 1500 and 2000.

Pathways: This course provides links to VCE History and Politics

#### **Indigenous Studies**

This unit is intended for students to gain an understanding of Indigenous life and culture, in particular the Gunditijmara people and country.

This unit will cover a large range of topics, including, but not limited to:

Life before contact with Europeans, the contact with Europeans and the massacres of Aboriginal and Torres Strait Islander people, the Stolen Generation, language groups, and the diversity and longevity of Australia's first peoples. Furthermore, this course will also study the significant ways Aboriginal and Torres Strait Islander peoples are connected to Country and Place (land, sea, waterways and skies) and the effects on their daily lives including the interconnectedness of Country/Place with people, culture and identity. Students will also learn about some of their principles, such as caring for country, caring for each other and respecting all things.

Pathways: This course provides links to VCE Geography and History

#### Money, Work and Me

Perhaps you are a budding entrepreneur wanting to start your own business or simply want to learn how to save your hard-earned money. Have you wondered about the taxes and fees you must pay in the workforce, or why superannuation is such a big deal? Do you know your responsibilities as a citizen or what the stock market is all about? This elective covers all the information you need when you leave school so that you become a well-rounded citizen capable of making informed choices. Learn about financial literacy and equip yourself with essential knowledge for your future.

Pathways: This course provides links to VCE Business Management

#### School of Thought

School of Thought is an integrative course that combines elements of psychology, philosophy, and personal development to foster a deep understanding of the self and the human mind. This course emphasizes the importance of introspection, self-reflection, and psychological theories in understanding personal identity, behaviour, and thought processes. Students will explore various psychological frameworks and reflective practices to enhance self-awareness and critical thinking.

Pathways: This course provides links to VCE Philosophy and Psychology

#### The BIG Question:

Are you interested in world issues and having a voice? If topics like climate in crisis, women's rights around the world, Black Lives Matter, incarcerated kids, refugees in crisis, closing the gap for Australia's Indigenous communities, raising the rate of welfare payments, renewable energy, homelessness and affordable housing, and domestic violence resonate with you, then this is the elective for you. In this unit, our class will discuss various topics affecting our world, and you will have the opportunity to choose a subject you are passionate about to develop a research report on. This is your chance to make your voice heard and share your views on important global issues.

Pathways: This course provides links to VCE Legal studies, History and Politics

#### Mapwork and Orienteering

Mapwork and Orienteering is a comprehensive course designed to equip students with essential navigation skills through the study and practical application of maps and compasses. This course emphasizes spatial awareness, critical thinking, and physical fitness, providing students with the tools needed to navigate both natural and urban environments with confidence and precision.

Pathways: This course provides links to VCE Geography and Outdoor Education

### Integrated Studies

#### The Business Lounge

In this student led elective, students get the opportunity to pursue their passion and experiment with building a business. The course will introduce students to several key business concepts including entrepreneurship and innovation, and may also cover issues such as personal banking, taxation and financial management. It includes a major focus on Marketing and the impact of marketing activities on customer buying behaviours. As well as learning new ways to think and look at the world, students can also gain valuable practical experience in setting up and managing a business through participating in the \$20 Boss program.

Pathways: This elective introduces VCE Business Management

#### Media

This subject provides students with the opportunity to examine the media in both historical and contemporary contexts while developing skills in media design and production in a range of media forms. Students investigate and analyse their and others' experience of the media, learning to understand the codes and conventions that are used to construct media narratives and products. Students will develop an understanding of traditional and contemporary media forms and analyse media stories and narratives to understand how meaning is constructed and how audiences are engaged. Media forms that will be investigated include moving image: film, television, video, animation, still image: photography, audio: radio, podcast, print: magazine, zine, comic, graphic novel, newspaper, poster, digital: online video and audio, streaming video and audio, podcast, magazine, comic, graphic novel, newspaper, video game, blog, website, app, convergent or hybridised media: the combination or joining of two or more media forms, such as photography and animation, print productions and a digital game, augmented and virtual reality products.

Pathways: This study leads to pathways including screen and media, marketing and advertising, games and interactive media, communication and writing, graphic and communication design, photography and animation. VCE Media, VCE Visual Communication Design and VCE Art.

#### **Be Resourceful**

From raw material to resource, how is it found, mined, produced and used? How does this process impact the environment, and can it be completed sustainably? How does the choices of the materials we use impact production and the environment? How can we lessen the need for the resource and how can we dispose of it ethically once we have used it? Learning Outcomes

Throughout the course, students learn and familiarise with the key topics and concepts of:

- Sustainability and environmental responsibility
- Waste management and processing (including robotic sorting, science of recycling, etc)
- Materials 101 what are things made of and why do we choose to make them out of those materials (properties)
- Raw materials and Resources where do these materials come from?
- Commodities and Trade <-Value
- Mineral vs non-mineral resources
- Geology 101
- Science of resource extraction -> Exploration through to processing/product.

Pathways: This elective introduces VCE Chemistry, Physics and Geography.

#### **Criminal Forensics**

This unit is an integrated science/humanities class that will look at legal cases and the use of forensic evidence. Students will gain an understanding of the legal system as well as practical experience in collecting and analysing all types of evidence that could relate to a crime scene.

Learning Outcomes:

Students will:

- Develop an understanding of forensics and how it can be used.
- Understand how laws are made
- Evaluate forensic evidence
- Explore types of forensic evidence including DNA, fingerprinting, hair/fibre analysis, handwriting/forgery, blood typing, and blood spatter patterns.

Pathways: This elective introduces VCE Legal Studies and VCE Science

### Language and Literature

#### Literature

For those who love reading and Literature in general, this elective will immerse students in some our most iconic and celebrated literary works. We will explore the Classics from Shakespeare and The Romantic Poets to more recent texts including great novels, plays, films and poetry. We will delve into the creative worlds of some of our greatest writers and directors developing an appreciation for their times and their experiences. Students will also be exposed to more complex concepts and skill levels in both their writing and in their ability to analyse and discuss texts. This can benefit them with their VCE English studies or can lead to VCE Literature.

Pathways: This subject will directly lead to VCE Literature and will complement VCE English

#### **Creative Writing**

Creative Writing is an exciting and dynamic subject designed to ignite your imagination and hone your storytelling skills. In this course, you'll explore various forms of writing, from short stories and poetry to scripts and personal essays. You'll learn to create compelling characters, craft vivid settings, and develop engaging plots. Through fun and interactive writing exercises, peer reviews, and reading a variety of inspiring texts, you'll discover your unique voice and style. Whether you dream of becoming a novelist, a screenwriter, or just love expressing yourself through words, Creative Writing will give you the tools and confidence to bring your ideas to life.

Pathways: This subject will prepare students for VCE English

#### Journalism

In this semester long course, students will investigate some of the significant issues and concerns that are experienced locally, in the state, federally and internationally. Students investigate a variety of local issues, interview a variety of organisations and write newspaper articles in response to those interviews. Students finish by writing an article of their own choice on a local issue.

Pathways: This course provides links to VCE English and anyone who is interested in a future in Journalism.

#### Year 9 Japanese

The Year 9 Japanese course continues to focus upon students learning to communicate about their daily lives. Students learn how to discuss their own history and identity including languages they speak and their nationality. Furthermore, students learn about food in Japan and compare this with food in Australia. Students are exposed to shopping in Japan and leisure activities including Japanese theme parks. Students continue their study of how to use adjectives in various tenses and they will be taught about verbs and how to conjugate verbs to suit the situation. Students learn about the culturally appropriate behaviour that accompanies the language topics and continue to refine their skills in the mastery of the Japanese script – with a particular focus on writing Katakana. Working throughout their "iiTomo" activity book, in conjunction with the accompanying student book, students will undertake reading, writing, listening, and speaking activities.

Pathways: This unit prepares students for senior LOTE – Japanese studies and provides conversation skills that will enable the student to participate confidently in the Japanese exchange program. The study of Japanese is also highly regarded in many occupations including business, hospitality, tourism, and trade.

Studying Japanese at VCE level enables students to gain bonus points toward their ATAR and makes them eligible for the prestigious VCE Baccalaureate Certificate.

#### Year 10 Japanese

The Year 10 Japanese course continues to build on student's knowledge and understanding of the Japanese language and culture. Students will learn to talk about shopping in both Australia and Japan, and how shopping in Japan reflects Japanese culture. Students will continue to build on their ability to talk about their leisure time, including how to invite and accept invitations, and make plans in Japanese. In addition to this, students will explore and compare how Australian and Japanese young people spend their weekends. Furthermore, students will learn to compare city and country life in both Australia and Japan, their neighbourhood and give directions. They will learn to discuss school trips including where and how long they stayed in a place, and transport to and from places. They will compare these trips to the experiences of Japanese students. Students will learn to discuss their part time jobs, including the reasons they work and how they spend their money. Finally, they learn to talk about their future aspirations, including what they are good at, what they like to do and give reasons for choosing careers. Throughout all topics, students will build on their knowledge of subject specific kanji, as well as consolidating knowledge of the katakana alphabet. Furthermore, students will be continually building on their cultural and intercultural awareness.

Pathways: This unit prepares students for senior LOTE – Japanese studies and provides conversation skills that will enable the student to participate confidently in the Japanese exchange program. The study of Japanese is also highly regarded in many occupations including business, hospitality, tourism, and trade. Studying Japanese at VCE level enables students to gain bonus points toward their ATAR and makes them eligible for the prestigious VCE Baccalaureate Certificate.

#### **Extension Japanese**

The Extension Japanese elective is designed for Year 9/10 students who wish to deepen their understanding of the Japanese language and culture. This course will explore various aspects of Japanese society, including weather and cities, landscapes, population dynamics, health and aging population, and dietary habits, which contribute to Japan's reputation as a healthy nation. Students will also learn about modern kawaii culture and its iconic characters. Through these topics, students will enhance their language skills and cultural awareness, providing a comprehensive understanding of contemporary Japan.

Pathways: This course provides links to VCE Japanese

#### Food Technology: Bakehouse

Join our exciting cooking class, "Bakehouse," where you'll embark on a delicious journey through the world of baking. This hands-on course is perfect for aspiring bakers eager to master the essentials and explore creative techniques in a fun, supportive environment. What You'll Learn the Baking Basics, understand key ingredients, accurate measuring, and essential kitchen safety. Cook a variety of Baked Goods from muffins, scones, cookies, and cakes to pies, tarts, and bread, you'll learn to bake a wide range of treat. Dive into layer cakes, laminated doughs, and specialty breads. Discover baking traditions from around the world. Create delicious gluten-free and special diet recipes and unleash your creativity by inventing unique baked goods and presenting them beautifully.

Pathways: This unit prepares students for VCE Food studies. It is a useful course for people interested in food, health, pe and health careers either through Apprenticeships, TAFE courses and University degree courses.

#### Food Technology: Mystery Box

Do you love cooking and crave a challenge? Join our Mystery Box Cooking Class and embark on a culinary adventure like no other! Each week, you'll receive a box filled with surprise ingredients and the mission to create a delicious dish. This exciting class is designed to boost your creativity, improve your cooking skills, and deepen your understanding of food safety and nutrition.

You'll learn essential techniques, from knife skills to baking, and explore a variety of cuisines from around the world. Work individually and in teams to develop unique recipes and wow your taste buds. Whether you're a seasoned cook or a kitchen newbie, this class offers something for everyone.

By the end of the semester, you'll have the confidence to whip up impressive meals and a portfolio of mouth-watering recipes you've created. Don't miss out on this fun and educational opportunity – sign up for the Mystery Box Cooking Class today and discover the chef within you!

Pathways: This unit prepares students for VCE Food studies. It is a useful course for people interested in food, health, pe and health careers either through Apprenticeships, TAFE courses and University degree courses.

#### Food Technology: 'Saucery' of Cooking

Get ready to embark on a delicious journey into the world of food and how it cooks. This year, we'll uncover the secrets behind the food we eat every day. From understanding how ingredients interact to create our Favorite dishes to discovering the science behind food safety and nutrition, you'll gain a new appreciation for the art of cooking. Through hands-on experiments, exciting projects, and tasty recipes, you'll learn how to apply the principles of cooking to enhance Flavors, textures, and presentation. Join us as we explore the fascinating world of food, transforming you into a young foodie ready to take on the kitchen with confidence and creativity!

Pathways: This unit prepares students for VCE Food studies. It is a useful course for people interested in food, health, pe and health careers either through Apprenticeships, TAFE courses and University degree courses.

#### **Textiles: Wearable Art**

This course explores the many categories of wearable technology, as well as closely related fields, such as wearable computing, techno fashion, electronic textiles, intelligent jewellery and smart clothes. Students will research, experiment with and design wearable technology projects. Through the design process students will engage in design challenges, meet the needs of clients, and develop products to suit design opportunities. Three core topics are explored — 'Fashion culture', 'Fashion technologies' and 'Fashion design'. Fashion culture explores fashion history, trends and fashion careers. Fashion technologies examine textiles and materials and the technical skills required for garment construction. Fashion design focuses on the design process and visual literacies. Students explore contemporary and historical fashion culture; learn to identify, understand and interpret fashion trends; and examine how the needs of different markets are met.

Pathways: This Unit prepares students for the Year 9/10 Product Design and Technology elective, VCE Design and Technology, VCE Studio Arts and VCE Visual Communication Design. It is a useful course for people interested in fashion and design or manufacturing careers either through apprenticeships and TAFE courses and University degree courses.

#### **Textiles: Fashion & Design**

Students will view different styles of products and create their own, developing a distinctive and personal style. Students research their choice of products and research the development and advancement of the product. The students are required to produce at least one quality product throughout the semester focusing on correct processes and techniques. They will be working from their choice of design and are expected to individualise their work. Students can work in any medium of their choice to research, design, produce and evaluate the product. E.g. Redesign clothing/ furniture/ jewellery/ interior design.

Pathways: This Unit prepares students for the Year 9/10 Product Design and Technology elective, VCE Design and Technology, VCE Studio Arts and VCE Visual Communication Design. It is a useful course for people interested in fashion and design or manufacturing careers either through apprenticeships and TAFE courses and University degree courses.

#### **Textiles: Fashion Styles & Merchandise**

Your journey starts here. You will develop creative and technical skills while looking closely at the fashion industry. Study design, pattern making and cutting-edge technology to produce everything from ready-to-wear through to made-to-measure fashion. You'll learn to blend theory with practice through a series of projects and activities.

Through your studies you will gain the skills required to be industry-ready, developing the knowledge and know-how to secure jobs in the fashion industry – especially in computer-aided design (CAD) and the global supply chains. You will develop a broad range of skills and study the underpinning theory of the design process, including fashion range development, trend research, specification development, design and production management, and pattern and garment construction skills.

Pathways: This Unit prepares students for the Year 9/10 Product Design and Technology elective, VCE Design and Technology, VCE Studio Arts and VCE Visual Communication Design.

#### Design Technology: Wood - Bedroom Cabinet

This course continues the development of skills acquired in other Design and Technology subjects, while providing the opportunity of designing and building with more complexity. It consolidates the importance of safe practices and the safe use of all tools and mechanised equipment in the workshop. Students explore aspects of design and produce a timber bedside

cabinet with drawers. The project demonstrates the procedural competencies such as setting out, accurate dimensioning, understanding the properties of raw materials and how to produce appropriate joins, lamination and fixing techniques to complete a functional and aesthetically pleasing piece. This subject also introduced aspects of VCE Design and Technology such as design options, research, the design brief, production planning and recording, drawing and evaluation.

Pathways: Prepares students for VCE Product Design and Technology. It may be that you just like designing and making. This subject is ideal for anyone interested in building trades, project management, designing, engineering and education.

Possible Careers: Building Trades, Project Management, Design – Drafting and Architecture, Quantity Surveying and Estimating, Education.

#### Design Technology: Wood - Coffee Table

This course looks at the factors that influence design, while continuing the development of skills acquired in other Design and Technology subjects. It also provides the opportunity of designing and building with more complexity. It consolidates the importance of safe practices and applies safe working methods in the workshop. Students explore aspects of design and produced a timber coffee table. The project demonstrates the procedural competencies such as setting out, accurate dimensioning, understanding the properties of raw materials and how to produce appropriate joins and fixing techniques to complete a functional and aesthetically pleasing piece. This subject also introduced aspects of VCE Design and Technology such as design options, research, management techniques, the design brief, production planning and recording, drawing and evaluation.

Pathways: Prepares students for VCE Product Design and Technology. It may be that you just like designing and making. This subject is ideal for anyone interested in building trades, project management, designing, engineering and education.

Possible Careers: Building Trades, Project Management, Design – Drafting and Architecture, Quantity Surveying and Estimating, Education.

#### Design Technology: Tool Up!

Starting your woodworking adventures can be expensive these days, with even the most basic beginner's setup costing hundreds of dollars. This course explores the art and craft of creating woodworking tools by hand, focusing on the traditional techniques and skills required to produce high-quality, functional tools. You will learn to design and fabricate essential woodworking tools such as saws, mallets, clamps and marking gauges. Tool Up! emphasizes precision, craftsmanship, and the selection of appropriate materials, with the ultimate goal of getting you designing and making bigger and more complex projects in the future.

Pathways: Prepares students for VCE Product Design and Technology. It may be that you just like designing and making. This subject is ideal for anyone interested in building trades, project management, designing, engineering and education.

Possible Careers: Building Trades, Project Management, Design – Drafting and Architecture, Quantity Surveying and Estimating, Education.

#### Pre-VCE Product Design and Technology (Textiles)

This course is designed directly towards students aiming to undertake this VCE subject. This pathway provides targeted preparatory experience for the respective pathway into Year 11 and Year 12. This course will provide you with the creative, practical, and technical skills studied in the VCE. It will allow you to become "hands on" in all aspects of fashion design. You will learn a range of design skills for the development of fashion concepts from research through to patternmaking, figure and size analysis, fitting, garment cutting and block construction, garment realisation and

merchandising. The course focusses on the individuality of students, and allows you to explore your own creativity, and to draw on various design disciplines to develop your own signature style of fashion and design.

Pathways: This Unit prepares students for the Year 9/10 Product Design and Technology elective, VCE Design and Technology, VCE Studio Arts and VCE Visual Communication Design.

#### Pre-VCE Product Design (Wood)

This course continues the development of skills acquired in other Design and Technology subjects, while providing the opportunity of designing and building with more complexity. It consolidates the importance of safe practices and the safe use of all tools and mechanised equipment in the Design and Technology workshop. Students will again have the chance to explore aspects of design and produce a timber model of their choice. The project will demonstrate the procedural competencies of building such as setting out, accurate dimensioning, understanding the properties of raw materials and how to produce appropriate joins and fixing techniques to complete a functional and aesthetically pleasing piece. Models that students may choose in consultation with teachers include a lamp, a bedside table, a portable chair, cabinets (tool/wall/standing), a toolbox, wooden toys, a kennel, mirrors and picture frames, a portable table, a timber trolley, as well as storage vessels of a student's choice. Computer Aided Design and hand drawn technical drawing are also part of this course.

Pathways: Prepares students for VCE Product Design and Technology.

# Science Tech Engineering & Maths (STEM)

#### Adaptations and Survival

Living organisms are faced with many challenges in their different environments. How they respond is both interesting and complex. This elective examines the challenges and threats that organisms face. Students will examine the consequences of human actions on the environment and consequently living things and the steps that can be taken to reduce our impact on planet Earth. Students will investigate how organisms adapt to environmental pressures. These responses allow organisms to not only survive, but too often thrive in our every changing environment. The process of Natural Selection as a mechanism for Evolution will be investigated through case studies.

#### Learning Outcomes

Students will develop a thorough knowledge of

- Environmental Change due natural processes and human activities
- Global Threats to biodiversity and survival
- Animal Adaptations structural, behavioural and physiological adaptations
- Natural Selections
- Evolution

Pathways: This elective provides a pathway to VCE Psychology and Biology

#### Game Design

The focus of this computing subject is becoming a creator rather than just a consumer of computer games and digital experiences. This subject teaches the fundamentals of computer programming, including planning, implementing and evaluating, through the process of designing and building a functional computer game. Students will learn the programming language(s) chosen and apply these skills to their own creative endeavour. By following an

iterative design process, students will learn skills in designing, prototyping, debugging and evaluating. This course is designed to expand upon skills introduced in Year 7 Digital Design and allow students with an interest in computing and creativity a chance to explore the possibilities of their imagination. This course will provide good foundational skills and would be suggested before undertaking Advanced Computing and/or VCE Applied Computing. Learning Outcomes

Students will develop a thorough knowledge of

- project management and the design process
- planning, implementing and evaluating software solutions
- designing and building functional computer games
- use of tools for collaborative workflow

Pathways: This elective provides a pathway to Advanced Computing, VCE Applied Computing and TAFE VET courses.

#### **Marine Science**

Marine science is the study of the ocean, its ecosystems and its life forms, as well as the study of coastal environments, oceanic currents and the sea floor. Learn how the amazing creatures on the shoreline and in rock pools survive; why whales and tuna visit our shores; the importance of ocean currents to Portland's fishing industry; how the spectacular coastal areas around Portland and the Great Ocean Road are formed. Students will investigate important factors influencing marine environments through practical activities and fieldwork. Students will also learn about threats to the marine ecosystems and look at solutions to the problems facing these fragile environments.

#### Learning Outcomes:

On completion of this unit the student should be able to:

- Understand the terms and concepts related to studying marine and coastal ecosystems
- Explain the different ways scientists monitor the health of the marine and coastal environment
- Describe different parts of the marine environment from data collected in the field
- Analyse monitoring data and write basic field reports
- Understand the interactions between organisms such as predator/prey, parasites, competitors, pollinators and disease
- Describe factors that affect population sizes such as seasonal changes, destruction of habitats, introduced species
- Explain how energy flows into and out of an ecosystem via the pathways of food webs, and how it must be replaced to maintain the sustainability of the system
- Understand how ecosystems change.
- Conduct laboratory experiments including dissections and write experimental reports

Pathways: This elective provides a pathway to VCE Biology, Environmental Science and Geography. Students who are interested in careers in Marine Biology; Zoology; Natural Resource Management (e.g. Park Ranger or Fisheries Officer); Maritime Safety, Navigation and Engineering; or Commercial Fishing will benefit from studying this elective.

#### Infinite Possibilities - Exploring Maths

Maths is an enormous subject, with all sorts of interesting ideas and theories that we don't always get to fully explore in the core maths curriculum. Mathematics Investigations allows students who are interested in what else Maths has to offer to discover a range of new concepts and ideas as well as work independently and in groups to work through a range of maths problems.

The aim of this subject is to extend students mathematical understanding and engage students in a wide range of problem solving and rich tasks. Students will focus on developing their problemsolving skills and to expand their mathematical understanding, both of which would contribute to an excellent foundation for higher level study of the subject in the Senior School. Mathematics. Maths Extension would also provide an element of individual choice, with the opportunity for students to independently investigate ideas that interest them further.

Pathways: This unit leads toward the VCE Math subjects, particularly Math Methods.

#### **Robotics**

This elective is designed to introduce students to the world of robotics through a range of hands-on experiences. Students will be exposed to computer programming languages including Scratch and Python. Through this course, students will have opportunities to compete in friendly in-class robotics competitions, with the potential to enter interschool competitions as part of a team.

#### Science Understanding and Practice

Students will examine how different types of scientific investigations are carried. They will learn new skills by participating in scientific experiments and field work. Questions, variables, predictions, results and conclusions will be formulated and understood. Each experiment that is studied by the class will provide the context for students to learn key concepts from the disciplines of Biology, Chemistry, Physics, and the Earth Sciences.

Students will design, perform, evaluate and communicate their findings on practical investigations of their choice. A key focus will be encouraging and providing opportunities for students to inquire scientifically and critically evaluate the scientific process. Students will develop ways to apply a methodology to turn their own questions into knowledge and investigations.

On completion of this unit the student should be able to:

- Design questions that can be investigated using a range of inquiry skills.
- Design methods that include the control and accurate measurement of variables and systematic collection of data and describe how they considered ethics and safety.
- Analyse trends in data, identify relationships between variables and reveal inconsistencies in results. They analyse their methods and the quality of their data, and explain specific actions to improve the quality of their evidence.
- Develop questions and hypotheses and independently design and improve appropriate methods of investigation, including field work and laboratory experimentation.
- Explain how they have considered reliability, safety, fairness and ethical actions.
- Analyse data to draw valid conclusions.
- Evaluate the validity and reliability of claims made in secondary sources.
- Construct evidence-based arguments and select appropriate representations and text types to communicate science ideas for specific purposes.

Pathways: This elective provides a pathway to VCE Biology, VCE Chemistry and VCE Physics.

#### Pre-VCE Biology: Control, Coordination, Genetics and Evolution

You are a multicellular organism made up of several body systems that work together to keep you alive. Your body systems are made up of organs, which are made up of types of cells. Your cells communicate with each other using electrical impulses and chemicals such as neurotransmitters and hormones. The coordination of this communication is essential so that the requirements of your cells are met, and a stable internal environment is maintained.

Important chemical reactions occur in living things, photosynthesis and cellular respiration are two of these important processes that convert the sun in plants and food in animals to an energy needed to fuel our cells. The characteristics of living things are determined by both the genetic information that they contain and the environment in which they live. New technologies have harnessed genetic machinery to change or create new organisms. What are the implications of manipulating the raw material of life?

Pathways: This elective provides a pathway to VCE Biology and VCE Psychology.

#### Pre-VCE Chemistry: Inside the Atom and Chemical Reactions

Imagine something so small that you cannot see it, even with the most powerful microscope. The quest to find out what was inside the atom is one of the great detective stories of all time. Every single living thing on Earth depends on chemical reactions. So, what are they, how do we know they occur and how can they be sped up or slowed down?

Millions of chemicals can be written using the approximately 118 symbols of the elements. The symbols of the elements in the periodic table are the chemists' alphabet. These formulae are used to write equations that show how the atoms in the reactants are rearranged to form products in a chemical reaction.

Pathways: This elective provides a pathway to VCE Chemistry.

#### Pre-VCE Physics: Motion, Astronomy and Electricity

The thrill of the rollercoaster ride allows you to experience sudden changes in motion. When the car suddenly falls, you seem to get left behind just for a while. When you reach the bottom of the track and the car rises, your stomach seems to sink. And when you round a bend, your body seems to be flung sideways. Such a ride raises many questions about the way in which forces affect motion and energy.

During an electrical storm, lightning flashes brightly. For less than a second the sky lights up as if it were the middle of the day. A short time later there is a huge crash of thunder. It's a spectacular sound and light show that all starts with electrical energy and heat. Lightning is a giant spark moving between clouds and the ground or between different clouds. The flash of lightning heats the air to temperature of 30 000 °C. The hot air expands, its particles crashing into the surrounding cold air particles. Thunder is a noise created by the crashing particles. On a cloudless night, a pattern of stars, galaxies and clouds of gas appears to spin above our heads. Yet against the backdrop, changes are taking place – often hard to see and sometimes spectacular, but always raising questions in our minds about the past and the future.

Pathways: This elective provides a pathway to VCE Physics.

#### Pre-VCE Psychology: Get Psyched

Ever wondered what makes you, you? Why is it hard to sleep some nights? What is the best strategy to revise before an exam? Are all styles of leadership effective? How does stress impact our bodies and our brain? In Pre-VCE Psychology, you'll embark on a journey to explore the fascinating world of the psychology

Development: Delve into the theories that explain how we grow and change, from emotions to intelligence and personality. We'll debate the age-old question: are we shaped more by nature (our genes) or nurture (our environment)?

Social Influence: Why do people follow trends? How do our values form? We'll investigate the forces that shape our attitudes and behaviours.

The Power of the Mind: Can psychology enhance athletic and academic performance? We'll explore the science behind sports psychology, learning and memory.

The Brain: Unravel the mysteries of the human nervous system, focusing on the brain's structure and function. What can go wrong? How can drugs and medications alter its function?

Get Hands-On: This course isn't just about theory! You'll gain practical experience through: Investigations: Conduct your own psychological research project, putting theory into action. Research Methods: Develop valuable research skills, learning how to gather and analyze data ethically.

#### Where will this take you?

Pre-VCE Psychology is the perfect springboard for further studies in VCE Psychology. It also equips you with valuable skills for careers in:

- Psychology
- Science
- Social Work
- Education
- Healthcare

### Visual and Performing Arts

#### **Performing Arts: Fusion**

This specialist subject introduces students to the Performing Arts which is a fusion of Drama and Music. Students will develop confidence and skills in the basic elements of drama. The course engages students in a variety of units which exemplify creativity, original thought and working with stimulus. Students will study the language of the Performing Arts and understand how to use that language during the analysis and creating processes. Students will be competent in creating and performing both scripted and improvised work, working in both small groups and as individuals.

Learning Outcomes: On completion of this unit the student should be able to demonstrate competency in:

- The basic elements of the Performing Arts
- Improvisation and theatre sports.
- Intertwining music in the Arts.
- Creating and developing both character and a performance.
- Written analysis of both the student's work, and the work of others.

Pathways: This elective will provide the necessary skills and knowledge for VCE Drama and Theatre Studies. This elective is a pathway for careers in the arts, design, performance and theatre production.

#### Acting and Action: Drama, Script Writing, Directing, and Sound

Unleash your creativity and step into the dynamic world of performing arts with our exciting new subject, "Acting and Action." Whether you aspire to be on stage, behind the scenes, or in the director's chair, this course offers the foundational skills and creative space to pursue your passion. Designed for Year 8, 9, and 10 students, this course integrates key elements of drama, script writing, directing, and sound, offering a comprehensive exploration of the theatrical arts in alignment with the Victorian Curriculum.

Acting and Action invites students to dive deep into the essence of performance. Through this course, students will: Develop Acting Skills: Learn and refine techniques in voice, movement, and character development. Engage in improvisation and scripted performances, enhancing their confidence and presence on stage. Master Script Writing: Explore the art of storytelling by creating original scripts. Understand narrative structures, character arcs, and dialogue to bring compelling stories to life. Explore Directing: Gain insights into the director's role. Learn how to interpret scripts, guide actors, and manage rehearsals to shape captivating performances. Harness the Power of Sound: Discover the impact of sound in theatre. Experiment with sound design, including the use of effects and music, to enrich the audience's experience.

#### **Rock Band**

This subject focuses on the study of the music industry and the development of the necessary skills to create and maintain a successful rock band. Students explore a range of related topics such as song writing, improvisation, and effective rehearsal techniques. This elective is open to students who currently play or wish to learn an instrument or vocal part. No prior rock band or song writing experience required. Students learn and develop skills in composition and performance in voice, guitar, bass guitar, percussion, and keyboards. Other instruments can be included. The Rock Band course has four units that centre around a period of Rock music history. Additionally, each unit focuses on a different set of music fundamentals including form, pulse, melody, harmony, texture, and dynamics. Students identify one or two songs from each style and form small groups (bands) to learn their respective instrumental/vocal parts.

Pathways: This elective will provide the necessary skills and knowledge for VCE Music and, VET Music Industry.

#### 2D ART: Drawing, Photography, Painting & Printmaking

Students explore all the mediums that an artist would use! Students explore art history, art criticism, aesthetics, and production that lead to the creation of a portfolio of quality works. Students apply media, techniques, and processes with sufficient skill to communicate intended meaning. They create abstract and realistic artworks exploring drawing, painting, printmaking, and sculpture. Students use a variety of materials such as pencil, dry and oil pastels, charcoal, pen and ink, watercolor, oil, acrylics, ceramics, plaster, and wire as well as the associated techniques. Students reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art.

Pathways: This unit will prepare students for VCE Studio Arts, VCE Visual Communication Design and VCE Design and Technology.

#### **3D Studies: Ceramics & Sculpture**

If you have ever wanted to make your own pottery, then this is the course for you! Explore different aspects of working with clay in this "hands on" course. Students will be using traditional methods of construction which can be divided into four major categories: Pinching, Coiling, Slab Building and Slip casting moulds. Students will be finishing the surfaces of ceramic/ pottery work using different colorants including underglazes and glazes. Functional as well as sculptural applications will also be explored. Students will fire their work using a kiln and design, construct, and evaluate a variety of products that could include plates, bowls, cups, (an entire dinner set), teapots, chess sets, clocks, and ornaments. The school has a huge variety of moulds that can be made into your own creation! Projects may include Ceramics, Plaster molding and casting, Marquette creation, stone carving, Magiclay and recycled art. Students who elect to take this class should want to grow as artists. Students will learn a high level of quality, craftsmanship, and complexity in their artwork. There will be a focus on the Elements and Principles of Art and design and artists and styles from around the world and throughout recorded history.

Pathways: This course is designed to prepare students for the VCE subjects of Studio Art, VCD, Product Design & Technology: Wood / Textiles.

#### **Buildings and Architecture**

Students will be encouraged to look at built surroundings with a critical eye. From home, school, shops and even movie and game sets, you are surrounded by environments that have been created by design professionals. Students will explore the history of architecture, changes in styles and use of materials and technology, and how this influences contemporary design. In addition, they will learn fundamental Architectural skills, such as creative thinking, technical drawing and creating presentation-level mock-ups of buildings (drawings and models).

Students will work in both 2D and 3D using various physical and digital tools. You will be given a specific design brief and work through the design process to create your building (past tasks include designing houses, school buildings, public sculptures, etc.) Creative thinking is an important design skill, so you will be encouraged to develop a range of different ideas in the early stages of the design process. After selecting the most original and interesting concept, you will refine it through trials and testing potential presentations before producing a manual or digital drawing or model of your structure.

Pathways: This course is designed to prepare students for VCE Visual Communication Design.

#### Visual Communication Design: Industrial Design (Objects)

Designers generate novel ideas for objects that are used to improve the quality of life for people, communities and societies, while also upgrading or improving existing designs. Among other things, designers develop objects including but not limited to products and packaging, furniture, fittings and homewares, transport, appliances, tools and machinery, costumes, toys, devices and displays. Important factors to consider when designing objects might include but are not limited to human behaviour, ergonomics, the sustainability of materials and manufacturing processes, aesthetics, usability and accessibility. Among those who develop objects the following can include but are not limited to industrial, product, graphic, furniture, jewellery, textile and fashion designers.

Learning Outcomes: On completion of this unit the student should demonstrate competency in:

- manual and digital (computer generated) methods including drawing, design elements and principles relevant to the design of three-dimensional objects
- rendering techniques used to simulate surfaces, materials, texture and form, and depict the direction of light, shade and shadow
- influences on design such as economic, technological, cultural, environmental and social factors
- sustainable and circular design practices, and their value

Pathways: This unit prepares students for VCE Visual Communication Design, VCE Design and Technology and VCE Studio Arts. It is a useful course for people interested in design or manufacturing careers either through apprenticeships and TAFE courses and University degree courses.

#### Pre-VCE Arts Making & Exhibiting

This unit is designed directly towards students aiming to undertake the VCE subject. This pathway provides targeted preparatory experience for the respective pathway into Year 11 and Year 12. Explore a new world of creative expression by acquiring basic skills and techniques to draw, paint, design or sculpt. You will be able to discover which visual language speaks best for you - fine art, design, or the many other forms of creative expression. This course is made up of selected units from the VCE and offers students an opportunity to experience a light and enjoyable introduction to VCE art studies. Develop your skills across varied art mediums and the arts business including Drawing, Painting, Printmaking, Sculpture, Jewellery, Photo digital imaging, researching and analysing art history and theory along with appropriate OH & S.

Pathways: This unit leads towards VCE Studio Arts. It is a useful course for people interested in art/ design or photographic careers either through apprenticeships, TAFE courses and University degree courses.

## Victorian Certificate of Education (VCE) &

### Vocational Major (VM)

UNIT 1 AND 2	UNIT 3 AND 4
Applied Computing	Applied Computing
Art: Creating and Exhibiting (Studio Art)	Art: Creating and Exhibiting (Studio Art)
Biology	Biology
Business Management	Business Management
Chemistry	Chemistry
Drama	Drama
English	English
English Literature	English Literature
Food Studies	Food Studies
Geography	Geography
Health and Human Development	Health and Human Development
History: Modern	History: Revolutions
Languages: Japanese	Languages: Japanese
Legal Studies	Legal Studies
Mathematics General	Mathematics General
Mathematics Methods	Mathematics Methods
Mathematics Specialist	Media Arts
Media Arts	Music
Music	Outdoor and Environmental Education
Outdoor and Environmental Education	Physical Education
Physical Education	Physics
Physics	Politics: Global Politics
Politics: Australian and Global Politics	Product Design Technology – Wood
Product Design Technology – Wood	Product Design Technology– Textiles
Product Design Technology – Textiles	Psychology
Psychology	Religion and Society
Religion and Society	Sociology
Sociology	Theatre Studies
Theatre Studies	Visual Communication Design
Visual Communication Design	VM Literacy
VM Literacy	VM Numeracy
VM Numeracy	VM Personal Development
VM Personal Development	VM Work Related Skills
VM Work Related Skills	VPC: Victorian Pathways Certificate
VPC: Victorian Pathways Certificate	

Access to VET DSS courses through TAFE

Access to VET DSS courses through TAFE

### VET DSS - Vocational Education Training Delivered in Secondary Schools

In partnership with Southwest TAFE and other providers Bayview College students can access the following VET DSS offerings, subject to student interest. VET DSS is available as an elective from Year 10. This is a great option for students choosing VCE but not doing an accelerated VCE subject as the VET DSS subject acts as their 6<sup>th</sup> VCE subject and will be finished before entering Year 12.

Application process for TAFE is completed online. Students need to be recommended by the school and complete a Literacy and Numeracy test for their spot. They also meet with TAFE teachers. Places are limited; therefore, students need to get in early.

#### South-West TAFE – Portland (Thursday afternoon)

Certificate 11 in Hospitality Certificate 11 in Electrotechnology (Pre-Vocational) (Must be in year 11) (Partial Completion) Certificate 111 in Early Childhood Education and Care (Must be in year 11) (Partial completion) Certificate 11 in Engineering Studies Certificate 11 in Horticulture (Partial Completion) Certificate 111 in Health Services Assistance (Partial Completion)

#### South-West TAFE (Warrnambool) (Thursday Afternoon)

Certificate 11 in Agriculture (Partial completion)

Certificate 11 in Automotive Vocational Preparation

Certificate 11 in Building and Construction Pre-Apprenticeship (Partial Completion)

Certificate 111 in Make-Up (Partial Completion)

Certificate 11 in Salon Assistant

Certificate 111 in Information Technology (Partial Completion)

Certificate 11 in Community Services (Partial Completion)

Certificate 111 in Visual Arts (Partial Completion)

#### Certificate III In Music Industry (Performance)

Auspice through COSAMP (delivered at Bayview)

#### Certificate III in VCE VET Dance

Provided by DanceXTensions, locally.

#### **Certificate II in Animal Studies**

Provided through GOTAFE (online)

#### **Certificate III Equine Studies**

Provided through GO TAFE (online)
### **Pathway Planning**

It is essential that students select subjects that will allow them to enter their desired field of interest. Many University Courses have pre-requisite subjects that must be completed at year 11 and 12 in order to be considered for the course. Students should research areas of interest by visiting web sites such as <u>www.myuniversity.gov.au</u> or <u>www.vtac.edu.au</u>



### Summary of the VCE Course

The VCE is a two-year course based on units in different studies leading to the award of the Victorian Certificate of Education. The VCE is governed by the rules and regulations prescribed by the Victorian Curriculum and Assessment Authority (VCAA).

Unit descriptions for all VCE studies offered at Bayview College can be found in the second section of this information booklet and on the VCAA website.

**Units 1 and 2** are usually taken in Year 11 but can also be taken in Year 10 or Year 12. They are assessed within the school and the result of **(S)** Satisfactory or **(N)** Not Satisfactory is reported to the Victorian Curriculum and Assessment Authority (VCAA).

**Units 3 and 4** are usually taken at Year 12 as they are substantially more difficult than Units 1 and 2. Satisfactory or Not Satisfactory completion of a unit is assessed within the school and the result **(S** or **N)** is reported to VCAA. Unit 3 and 4 must be taken as a sequence or pair. Units 3 and 4 have externally set and assessed formal examinations.

### Assessment

Satisfactory completion of a unit is based on demonstrated achievement of the outcomes specific for that unit.

The standard of achievement in Units 1 & 2 is determined by the teachers of each unit. It is not reported to VCAA but is reported to parents and students by the school at the usual reporting times.

The standard of achievement in Unit 3 & 4 is determined by assessment tasks spread across Unit 3 and Unit 4. These tasks are set by VCAA - some are assessed by the unit teachers, and some are assessed by VCAA. Results of each task are based on the grades A+ to E and UG (Ungraded - low standard) or NA (Not Assessed - not attempted). These grades are reported to parents and students by VCAA at the end of the year.

### Successful Completion of the Victorian Certificate of Education

To graduate with the Victorian Certificate of Education students must satisfactorily complete

- at least 16 units over two years
- these must include:
  - 1. three units from the English group (English, Literature)
  - 2. at least three pairs of Units 3 and 4 other than English

Students must satisfactorily complete all the outcomes in a Unit to gain Satisfactory Completion. Failure to complete even one outcome means a student will not be deemed to have satisfactorily completed the unit.

Students must also have at least an 90% attendance in subjects to pass. If, for any valid reason, a student is unable to complete an outcome by the due date, he or she may apply (in writing) to the VCE Coordinator for an extension of time, provided that the application is submitted before the due date.

### The General Achievement Test - GAT

All students studying any level 3 and 4 units are required by VCAA to sit the General Achievement Test. The GAT is a test of general skills, rather than specific knowledge, and covers the areas of Written Expression, Humanities/Arts/Social Sciences and Mathematics/Science/Technology. It is used in conjunction with other Unit 3 and 4 assessment tasks, including examinations to assist in ensuring a fair and equitable subject study score.

### Advice on Entry to Tertiary Courses

Entry into most, but not all tertiary courses is coordinated by the Victorian Tertiary Admissions Centre (VTAC). During August Year 12 students can apply through VTAC for up to twelve tertiary courses, in order of preference, into which they wish to gain entry in the following year.

As students do not always get their first or second preference, as course places are limited, students must carefully consider several possible course and career options. Careful consideration of future career paths and possible courses should be part of the decision process when choosing Year 11 and 12 units.

Selection into Tertiary Courses is based on either the ATAR (Australian Tertiary Admission Rank)

and/or	-	an inferview
AND/OR	-	submission of a folio of student work

AND/OR - completion of an application form

**Calculation of the ATAR** tends to be complicated but is based on the sum of the Study Scores (Relative Position) achieved on assessment tasks in:

- English 3 & 4
- the best three other Unit 3 & 4 studies
- Plus 10% of those received in a fifth (or sixth study) Unit 3 & 4 study.

Any units in which N (Not Satisfactorily Completed) is obtained will not be used for score calculation.

The ATAR will provide an overall percentile **ranking**, calculated in steps of 0.05, reflecting the **comparative performance** of each applicant against all other competing applicants each year. The highest rank will be 99.95.

The ATAR is calculated by VTAC and conveyed to those people who are selecting students for courses. These course selection officers then choose students with the highest scores from a list of those students seeking entry to their courses.

For applicants whose ATAR's for a particular course are 'borderline', some other factors may be taken into consideration. For example, the Selection Officer may look more closely at how an applicant performed on the examinations as opposed to the school assessed tasks. For some courses a 'bonus' is awarded for completion of particular subjects. This process is known as Middle-band selection.

Interviews, if required, are usually conducted to determine the aptitude of a student for a particular course. Work Experience completed in a relevant area often is a useful background for these interviews. Folios of student work are usually required for most Art and Design courses.

#### **Minimum Entrance Requirements**

To be eligible for entry into a Tertiary Institution, students will need to:

- satisfactorily complete the VCE
- demonstrate achievement in the outcomes for English/Literature Units 3 and 4
- Complete pre-requisite subjects

Most tertiary courses specify that certain prerequisite studies must be satisfactorily completed before a student will be considered for the course. These prerequisite studies are usually at the Unit 3 and 4 levels and may require a minimum grade average.

# VCE and the Vocational Major:

### VCE-VM

The Victorian Certificate of Education (VCE) is Victoria's senior secondary qualification. It opens pathways to university, higher-level TAFE or VET certificate courses, apprenticeships, traineeships and the workforce.

The VCE is expanding to include the Vocational Major, a 2-year vocational and applied learning program. It will replace Senior and Intermediate VM from 2023.

The VCE Vocational Major will develop your personal and practical life skills. It will help to prepare you for the next important stage of your life.

### The VCE Vocational Major offers a pathway into:

- apprenticeships
- traineeships
- further education and training
- university (through alternative entry programs)
- employment

### Achieving the VCE Vocational Major

To complete your VCE Vocational Major, you must successfully finish at least 16 units.

You must also complete at least 3 other unit 3–4 sequences. This means 3 other full year studies at a year 12 level and a VET DSS.

You will apply knowledge and skills in practical settings such as workplaces. You'll do community-based activities and projects that involve working in a team. You can also receive credit for on-the-job learning.

Your teachers will assess your progress through a range of activities. You will not receive an ATAR. This is because there are no external assessments, apart from the General Achievement Test and in some scored VCE VET programs.

Most students will finish their VCE Vocational Major over 2 years.

### When you've completed your course, you will receive a Victorian Certificate of Education with the additional words 'Vocational Major'.

It is critical that students investigate fully all possible options and have a full understanding of the requirements of VM, VCE and VET. Visiting the following web sites is recommended and reading the information provided by Bayview College.

### Websites

### VCE

- its structure
- specific course information
- guidelines and expectations
- assessment- including past examinations for unit 3 and 4 subjects
- the GAT

www.vcaa.vic.edu.au and follow the links to VCE

### VET

- VET and TAFE courses available in the South West: <u>www.swtafe.vic.edu.au/vetis/</u>
- For information on VET accredited courses in Australia: <u>www.myfuture.edu.au</u>
- Tertiary courses: <u>www.vtac.edu.au/</u>
- Options available when you finish school:
  - o www.year12whatnext.gov.au
  - o <u>www.goingtouni.gov.au</u>
  - o <u>www.myuniversity.gov.au</u>

#### **Career Guidance**

- On different occupations and the training they require: <u>www.jobguide.deewr.gov.au</u>
- For information on apprenticeships: <u>www.australia.gov.au/australianapprenticeships</u>
- Volunteering: <u>www.volunteersearch.gov.au</u>
- Work options: <u>www.jobjuice.gov.au</u>

### Read the following documents:

- Job Guide
- VTAC Guide to Tertiary Courses
- VTAC Tertiary Entrance Requirements (i.e., VICTER 2017/2018)
- VTAC Course link (available on <u>www.vtac.edu.au</u>)

### Talk to:

- Careers teacher
- Senior years co-ordinator Year level co-ordination
- Subject teachers
- WESTVIC Employment

### Applied Computing

This study enables students to:

- apply skills, techniques, processes, and a methodology to create digital solutions that meet a range of needs and conditions.
- understand how data can be represented in digital systems and structured and manipulated to become part of a digital solution become independent and discerning users of digital systems, able to critically appraise the opportunities and appropriateness of different digital systems in a range of settings.
- understand the components of information systems and the architecture of the associated digital systems and how digital systems, processes, legislation, and personal behaviours can affect the integrity and security of data and information.
- apply computational, design and systems thinking skills when creating digital solutions.

### Unit 1: Computing

In this unit students focus on how data, information and networked digital systems can be used to meet a range of users' current and future needs. In Area of Study 1 students collect primary data when investigating an issue, practice or event and create a digital solution that graphically presents the findings of the investigation. In Area of Study 2 students examine the technical underpinnings of wireless and mobile networks, and security controls to protect stored and transmitted data, to design a network solution that meets an identified need or opportunity. In Area of Study 3 students acquire and apply their knowledge of information architecture and user interfaces, together with web authoring skills, when creating a website to present different viewpoints on a contemporary issue.

### **Unit 2: IT Computing**

In this unit students focus on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data. In Area of Study 1 students develop their computational thinking skills when using a programming or scripting language to create solutions. They engage in the design and development stages of the problem-solving methodology. In Area of Study 2 students develop a sound understanding of data and how a range of software tools can be used to extract data from large repositories and manipulate it to create visualisations that are clear, usable, and attractive, and reduce the complexity of data. In Area of Study 3 students apply all stages of the problem-solving methodology to create a solution using database management software and explain how they are personally affected by their interactions with a database system.

### **Unit 3: Informatics**

In Informatics Units 3 and 4 students focus on data, information, and information systems. In Unit 3 students consider data and how it is acquired, managed, manipulated, and interpreted to meet a range of needs. In Area of Study 1 students investigate the way organisations acquire data using interactive online solutions, such as websites and applications (apps), and consider how users interact with these solutions when conducting online transactions. They examine how relational database management systems (RDBMS) store and manipulate data typically acquired this way. Students use software to create user flow diagrams that depict how users interact with online solutions and acquire and apply knowledge and skills in the use of an RDBMS to create a solution.

### Unit 4: Informatics

In this unit students focus on strategies and techniques for manipulating, managing and securing data and information to meet a range of needs. In Area of Study 1 students draw on the analysis and conclusion of their hypothesis determined in Unit 3, Outcome 2, and then design, develop and evaluate a multimodal, online solution that effectively communicates the conclusion and findings. The evaluation focuses on the effectiveness of the solution in communicating the conclusion and the reasonableness of the findings. Students use their project plan to monitor their progress and assess the effectiveness of their plan and adjustments in managing the project.

### Art: Creating and Exhibiting (Studio Art)

VCE Art Making and Exhibiting introduces students to the methods used to make artworks and how artworks are presented and exhibited.

Students use inquiry learning to explore, develop and refine the use of materials, techniques, and processes and to develop their knowledge and understanding of the ways artworks are made. They learn how art elements and art principles are used to create aesthetic qualities in artworks and how ideas are communicated using visual language. Their knowledge and skills evolve through the experience of making and presenting their own artworks and through the viewing and analysis of artworks by other artists.

### Unit 1: Explore, Expand, and Investigate

In this unit students explore materials, techniques, and processes in a range of art forms. They expand their knowledge and understanding of the characteristics, properties and application of materials used in art making. They explore selected materials to understand how they relate to specific art forms and how they can be used in the making of artworks. Students also explore the historical development of specific art forms and investigate how the characteristics, properties and use of materials and techniques have changed over time. Throughout their investigation students become aware of and understand the safe handling of materials they use.

### Unit 2: Understand, Develop and Resolve

In Unit 2 students continue to research how artworks are made by investigating how artists use aesthetic qualities to represent ideas in artworks. They broaden their investigation to understand how artworks are displayed to audiences, and how ideas are represented to communicate meaning.

Students respond to a set theme and progressively develop their own ideas. Students learn how to develop their ideas using materials, techniques and processes, and art elements and art principles. They consolidate these ideas to plan and make finished artworks, reflecting on their knowledge and understanding of the aesthetic qualities of artworks. The planning and development of at least one finished artwork are documented in their Visual Arts journal.

### Unit 3: Collect, Extend and Connect

In this unit students are actively engaged in art making using materials, techniques, and processes. They explore contexts, subject matter, and ideas to develop artworks in imaginative and creative ways. They also investigate how artists use visual language to represent ideas and meaning in artworks. The materials, techniques, and processes of the art form the students work with are fundamental to the artworks they make.

Students use their Visual Arts journal to record their art making. They record their research of artists, artworks and collected ideas and document the iterative and interrelated aspects of art making to connect the inspirations and influences they have researched. The Visual Arts journal demonstrates the students' exploration of contexts, ideas and subject matter and their understanding of visual language.

### Unit 4: Consolidate, Present and Conserve

In Unit 4 students make connections to the artworks they have made in Unit 3, consolidating and extending their ideas and art making to further refine and resolve artworks in -specific art forms. The progressive resolution of these artworks is documented in the student's Visual Arts journal, demonstrating their developing technical skills in a specific art form as well as their refinement and resolution of subject matter, ideas, visual language, aesthetic qualities, and style. Students also reflect on their selected finished artworks and evaluate the materials, techniques and processes used to make them.

### Biology

This study enables students to:

- develop knowledge and understanding of key biological models, theories, concepts and issues from the individual cell to species level.
- develop knowledge and understanding of organisms, their relationship to their environment, and the consequences of biological change over time, including the impact of human endeavours on biological processes and the survival of species and more broadly to:
- develop attitudes that include curiosity, open-mindedness, creativity, flexibility, integrity, attention to detail and respect for evidence-based conclusions.
- develop an understanding of the cooperative, cumulative, iterative and interdisciplinary nature of science as a human endeavour, including its possibilities, limitations and sociocultural, economic, political and legal influences and consequences.
- develop a range of individual and collaborative science inquiry skills through a variety of investigation methodologies in the laboratory and field, refining investigations to improve data quality.
- understand the research, ethical and safety guidelines that govern the study and practice of the discipline and apply these guidelines to generate, collate, analyse, critically evaluate and report data.
- analyse and interpret qualitative and quantitative data to provide evidence, recognising patterns, relationships, and limitations of data.
- develop an informed and critical perspective, as local and global citizens, on contemporary science-based issues.
- develop knowledge and understanding of key models, concepts, theories, and laws of science to explain scientific processes and phenomena, and apply this understanding in familiar and unfamiliar situations, including personal, sociocultural, environmental, and technological contexts.
- communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions, and formats.

### Unit 1: How do organisms regulate their functions?

In this unit students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, including the requirements for sustaining cellular processes. Students focus on cell growth, replacement and death and the role of stem cells in differentiation, specialisation, and renewal of cells. They explore how systems function through cell specialisation in vascular plants and animals and consider the role homeostatic mechanisms play in maintaining an animal's internal environment.

### Unit 2: How does inheritance impact diversity?

In this unit students explore reproduction and the transmission of biological information from generation to generation and the impact this has on species diversity. They apply their understanding of chromosomes to explain the process of meiosis. Students consider how the

relationship between genes, the environment and epigenetic factors influence phenotypic expression. They explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts, and predict outcomes of genetic crosses.

Students analyse the advantages and disadvantages of asexual and sexual reproductive strategies, including the use of reproductive cloning technologies. They study structural, physiological, and behavioral adaptations that enhance an organism's survival. Students explore interdependences between species, focusing on how keystone species and top predators' structure and maintain the distribution, density, and size of a population. They also consider the contributions of Aboriginal and Torres Strait Islander knowledge and perspectives in understanding the survival of organisms in Australian ecosystems.

### 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?

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 palaeontology, 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.

### NB: Either Business Management OR Legal Studies will run based on student interest. But probably not both.

This study is designed to enable students to:

- Acquire knowledge of the ways in which businesses are managed.
- Develop an understanding of management and concepts & relationships on which it is built.
- Examine the role and functions of management across a range of contexts.
- Explore the operation of management in practice.
- Acquire knowledge of the skills required in management.
- Examine the values and assumptions underlying business management practice and theory.

### Unit 1: Planning a Business

Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. The ability of entrepreneurs to establish a business 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, as well as the effect of these on planning a business. They also consider the importance of the business sector to the national economy and social wellbeing.

### Unit 2: Establishing a Business

This unit focuses on the establishment phase of a business. Establishing a business involves compliance with legal requirements as well as 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 met 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 management practices by applying key 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. Students develop an understanding of the complexity and challenge of managing businesses

and using contemporary business case studies from the past four years can compare theoretical perspectives with current practice.

### 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. Using a contemporary business case study from the past four years, students evaluate business practice against theory.

## Chemistry

This study enables students to:

- apply models, theories, and concepts to describe, explain, analyse and make predictions about chemical phenomena, systems, structures and properties, and the factors that can affect them.
- understand and use the language and methodologies of chemistry to solve qualitative and quantitative problems in familiar and unfamiliar contexts.
- and more broadly to:
- understand the cooperative, cumulative, evolutionary, and interdisciplinary nature of science as a human endeavour, including its possibilities, limitations, and political and sociocultural influences.
- develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory.
- develop an informed perspective on contemporary science-based issues of local and global significance.
- apply their scientific understanding to familiar and unfamiliar situations including personal, social, environmental, and technological contexts.
- develop attitudes that include curiosity, open-mindedness, creativity, flexibility, integrity, attention to detail and respect for evidence-based conclusions.
- understand and apply the research, ethical and safety principles that govern the study and practice of the discipline of collection, analysis, critical evaluation and reporting of data.
- communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions, and formats.

### Unit 1: How can the diversity of materials be explained?

The development and use of materials for specific purposes is an important human endeavor. In this unit students investigate the chemical structures and properties of a range of materials, including covalent compounds, metals, ionic compounds, and polymers. They are introduced to ways that chemical quantities are measured. They consider how manufacturing innovations lead to more sustainable products being produced 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.

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

### Unit 2: How do chemical reactions shape the natural world?

Society is dependent on the work of chemists to analyse the materials and products in everyday use. In this unit students analyse 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, acidbase and redox reactions, solubility, molar volume of a gas, volumetric analysis, and the use of a calibration curve.

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

### Unit 3: How can design and innovation help to optimise chemical processes?

The global demand for energy and materials is increasing with world population growth. In this unit students investigate the chemical production of energy and materials. They explore how innovation, design and sustainability principles and concepts can be applied to produce energy and materials while minimising possible harmful effects of production on human health and the environment.

Students analyse and compare different fuels as energy sources for society, with reference to the energy transformations and chemical reactions involved, energy efficiencies, environmental impacts and potential applications. They explore food in the context of supplying energy in living systems. The purpose, design and operating principles of galvanic cells, fuel cells, rechargeable cells and electrolytic cells are considered when evaluating their suitability for supplying society's needs for energy and materials. They evaluate chemical processes with reference to factors that influence their reaction rates and extent. They investigate how the rate of a reaction can be controlled so that it occurs at the optimum rate while avoiding unwanted side reactions and by-products. Students conduct practical investigations involving thermochemistry, redox reactions, electrochemical cells, reaction rates and equilibrium systems.

### Unit 4: How are carbon-based compounds designed for purpose?

Carbon is the basis not only of the structure of living tissues but is also found in fuels, foods, medicines, polymers and many other materials that we use in everyday life. In this unit students investigate the structures and reactions of carbon-based organic compounds, including considering how green chemistry principles are applied in the production of synthetic organic compounds. They study the metabolism of food and the action of medicines in the body. They explore how laboratory analysis and various instrumentation techniques can be applied to analyse organic compounds in order to identify them and to ensure product purity.

Students conduct practical investigations related to the synthesis and analysis of organic compounds, involving reaction pathways, organic synthesis, identification of functional groups, direct redox titrations, solvent extraction and distillations.

### Drama

### NB: Either Drama or Theatre Studies would run based on student interest, but not both.

This study is designed to enable students to:

- develop an understanding of the origins, forms, and purposes of performance from a diversity of cultures.
- develop an understanding of the processes of developing role and character.
- develop, through practice and analysis, an understanding of drama as an evolving performing art.
- use dramatic elements, theatrical conventions, and stagecraft in creating, developing, and performing dramatic works.
- develop and refine expressive and performance skills.
- create, perform, and evaluate solo and ensemble performances.

### Unit 1: Dramatic storytelling

This unit focuses on creating, presenting, and analysing a devised 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 of a performance by professional drama practitioners. In this unit students use performance styles from a range of contexts associated with naturalism and non-naturalism.

### Unit 2: Non-Naturalistic Australian drama

This unit focuses on the use and documentation of the processes involved in constructing a devised solo or ensemble performance that uses non-naturalistic performance styles. 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.

Students use a range of stimulus material in creating the performance and examine non – naturalistic performance styles from a range of contexts relevant to Australia and Australians. Conventions appropriate to the selected performance styles are also explored. Students' knowledge of how dramatic elements can be enhanced or manipulated through performance is further developed in this unit. Students analyse their own performance work as well as undertake the analysis of a performance of an Australian work by other actors. An Australian work might be written, adapted, or devised by Australian writers or theatre-makers or reflect aspects of the Australian identity, for example the indigenous voice, the Celtic perspective, the twentieth or twenty-first century migrant experience, the refugee experience, the urban and rural perspectives.

### Unit 3: Devised Non-Naturalistic Ensemble Performance

This unit focuses on non-naturalistic devised ensemble drama. Students explore non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions and work collaboratively to devise, develop and present an ensemble performance. Students use and manipulate dramatic elements, conventions, performance and expressive skills, performance styles and stagecraft in non-naturalistic ways to shape and enhance the performance. Students also document and evaluate stages involved in the creation, development, and presentation of the ensemble performance.

### Unit 4: Non-Naturalistic Solo Performance

Students explore non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions. They develop skill in extracting dramatic potential from stimulus material and use dramatic elements, conventions, performance styles and performance and expressive skills to develop and present a short solo performance. These skills are further developed as students create a devised solo performance in response to a prescribed structure. Students also document and evaluate the stages involved in the creation, development, and presentation of a solo performance.

### English

This study enables students to:

- extend their English language skills through thinking, listening, speaking, reading, viewing, and writing.
- enhance their understanding, enjoyment, and appreciation of the English language in its written, spoken, and multimodal forms.
- analyse and discuss a range of texts from different periods, styles, genres, and contexts.
- understand how culture, values and context underpin the construction of texts and how this can affect meaning and interpretation.
- understand how ideas are presented by analysing form, purpose, context, structure, and language.
- analyse their own and others' texts, and make relevant connections to themselves, their community, and the world.
- convey ideas, feelings, observations, and information effectively in written, spoken, and multimodal forms to a range of audiences.
- recognise the role of language in thinking and expression of ideas.
- demonstrate in the creation of their own written, spoken, and multimodal texts an ability to make informed choices about the construction of texts in relation to purpose, audience, and context.

- extend their use of the conventions of Standard Australian English with assurance, precision, vitality, and confidence in a variety of contexts, including for further study, the workplace and their own needs and interests.
- extend their competence in planning, creating, reviewing, and editing their texts for precision and clarity, tone and stylistic effect.

### Unit 1:

In this area of study, 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.

### Unit 2:

In this area of study, 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.

### Unit 3:

In this area of study students identify, discuss, and analyse how the features of selected texts create meaning and how they influence interpretation. In identifying and analysing explicit and implied ideas and values in texts, students examine the ways in which readers are invited to respond to texts. They develop and justify their own detailed interpretations of texts.

#### Unit 4:

In this unit students compare the presentation of ideas, issues, and themes in texts. They create an oral presentation intended to position audiences about an issue currently debated in the media.

### English Literature

This study enables students to:

- develop an enjoyment of language and literature through reading deeply, widely, and critically.
- appreciate the stylistic and aesthetic qualities of texts and develop an understanding of and sensitivity to nuances in the English language.
- read closely, developing the ability to engage in detailed critical analysis of the key literary features of individual texts and to make relevant connections between them.
- demonstrate an understanding that the context and perspective of both author and reader influence the reading experience.
- develop the capacity for critical thinking and understanding of the relationship between literature and society.
- develop an understanding of literary criticism.
- develop the capacity to engage with and contest complex and challenging ideas to develop their own interpretation informed by a range of literary criticism.
- develop the capacity for creativity and self-expression, and the ability to write confident analytical and creative responses to texts.

### Unit 1:

In this area of study students consider how language, structure and stylistic choices are used in different literary forms and types of text. They consider both print and non-print texts, reflecting on the contribution of form and style to meaning. Students reflect on the degree to which points of view, experiences and contexts shape their own and others' interpretations of text.

### Unit 2:

In this area of study students explore the 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 of Aboriginal and Torres Strait Islander peoples, including connections to Country, the impact of colonisation and its ongoing consequences, and issues of reconciliation and reclamation.

### Unit 3:

In this unit students consider how the form of a text affects meaning, and how writers construct their texts. They investigate ways writers adapt and transform texts and how meaning is affected as texts are adapted and transformed. They consider how the perspectives of those adapting texts may inform or influence the adaptations. Students draw on their study of adaptations and transformations to develop creative responses to texts.

### Unit 4:

In this unit students develop critical and analytic responses to texts. They consider the context of their responses to texts as well as the ideas explored in the texts, the style of the language and points of view. They investigate literary criticism informing both the reading and writing of texts. Students develop an informed and sustained interpretation supported by close textual analysis. For the purposes of this unit, literary criticism is characterised by extended, informed, and substantiated views on texts and may include reviews, peer-reviewed articles and transcripts of speeches. Specifically, for Unit 4 Outcome 1, the literary criticism selected must reflect different perspectives, assumptions and ideas about the views and values of the text/s studied.

### Food Studies

VCE Food Studies takes an interdisciplinary approach to the exploration of food, with an emphasis on extending food knowledge and skills, and building individual pathways to health and wellbeing through the application of practical food skills. VCE Food Studies provides a framework for informed and confident food selection and food preparation within today's complex architecture of influences and choices.

Students explore food from a wide range of perspectives. They study past and present patterns of eating, Australian and global food production systems, and the many physical and social functions and roles of food. Students research sustainability and the legal, economic, psychological, sociocultural, health, ethical and political dimensions of food, and critically evaluate information, marketing messages and new trends.

### 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 food-producing region of the world.

### **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.

### 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.

### 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.

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.

## Geography

This study is designed to enable students to:

- Develop a sense of wonder and curiosity about people, culture, and environments throughout the world.
- Develop knowledge and understanding of geographic phenomena at a range of temporal and spatial scales.
- Understand and apply geographical concepts including place, scale, distance, distribution, movement, region, process, change, spatial association, and sustainability to develop their ability to think and communicate geographically.
- Develop an understanding of the complexity of natural and human induced geographic phenomena across the Earth's surface.
- Develop a range of skills to assist in analysing information and making informed judgements and decisions about geographic challenges.
- Understand the importance of Geography in analysing issues and challenges to human welfare and the environment, at a range of scales.
- Develop an understanding of the role and application of Geography in the planning and management of human welfare and the environment.

### Unit 1: Hazards and disasters

In this unit the students will undertake an overview of hazards before investigating two contrasting types of hazards and the response to them by people. Hazards represent the potential to cause harm to people and the environment whereas disasters are judgments about the impacts of hazard events. Examples of hazards include Geological – volcanoes, earthquakes, tsunamis, and landslides; Biological – HIV/AIDS, malaria, animal transmitted diseases, and animal invasions; Human induced – pollution, epidemics, climate change and oil spills. Students undertake fieldwork in this unit.

### Unit 2: Tourism

In this unit students investigate the characteristics of tourism, with particular emphasis on where it is has developed, its various forms, how it has changed and continues to change and its impacts on people, places, and environments. Tourism is studied at a local, regional, and global scale and how it impacts on the people. Students undertake fieldwork in this unit.

### 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 forests, 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 because of the interconnection between climate, soils, landforms and flora and fauna and, increasingly, interconnections with human activity.

### 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 government's organisations and individuals have responded to those changes in different parts of the world. Students study 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.

### Unit 3: Regional resources

This unit investigates the characteristics of resources and the concept of region. A resource is anything which occurs naturally or is created by humans that people use to satisfy a need or want. Resources found within regions mean different things to different people over place and time. A study of resources is about the processes and relationships operating in the past, in the present, and those which will operate in the future. Regions are areas of various scales that have characteristics and features that distinguish them from other areas according to the elements used to define them. The use and management of resources is dynamic and changes spatially over time in response to the interactions between human activities, natural processes, and the legislative processes that humans put into place. Social, historical, environmental, economic, and political factors can be used to predict and plan for future policies and strategies to ensure the sustainability of the available resources.

### Unit 4: Global perspectives

Global phenomena are major natural or human events, processes, or activities. Such phenomena are distributed globally and possess the capacity to affect the globe or significant parts of the globe and require more than a local or national response.

### NB: Either History OR Politics will run based on student interest. But probably not both.

This study enables students to:

- develop an understanding of the nature of history as a discipline and to engage in historical inquiry.
- ask questions about the past, analyse primary and secondary sources, and construct historical arguments based on evidence.
- use historical thinking concepts such as significance, evidence, continuity and change, and causation.
- explore a range of people, places, ideas, and periods to develop a broad understanding of the past.
- engage with debates between historians in an informed, critical, and effective manner.
- recognise that the way in which we understand the past informs decision-making in the present.
- appreciate that the world in which we live has not always been as it is now, and that it will continue to change in the future.

### 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.

### Unit 3 and 4: Revolutions

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 which brings about the collapse and destruction of an existing political order resulting in a pervasive change to society. Revolutions are caused by the interplay of ideas, events, individuals, and popular movements. Their consequences have a profound effect on the political and social structures of the post-revolutionary society. Revolution is a dramatically accelerated process whereby the new order attempts to create political and social change and transformation based on a new ideology. Progress in a post-revolutionary society is not guaranteed or inevitable. Post-revolutionary regimes are often threatened internally by civil war and externally by foreign threats. These challenges can result in a compromise of revolutionary ideals and extreme measures of violence, oppression, and terror.

This study enables students to:

- understand the complex nature of health and human development
- develop a broad view of health and wellbeing, incorporating physical, social, emotional, mental and spiritual dimensions
- understand the biological, sociocultural and environmental factors that impact health and wellbeing
- develop health literacy to evaluate health information and take appropriate and positive action to support health and wellbeing
- develop understanding of the Australian healthcare system and the values that underpin it
- apply social justice principles to identify health and wellbeing inequities and analyse health and wellbeing interventions
- understand the importance of the United Nations' (UN's) Sustainable Development Goals (SDGs) and evaluate the effectiveness of health and wellbeing initiatives and programs to support the achievement of the SDGs
- propose and justify action to positively influence health and wellbeing, and human development, outcomes at individual, local, national and/or global levels.

### Unit 1: Understanding Health and Wellbeing

In this unit, students explore health and wellbeing as a concept with varied and evolving perspectives and definitions. They come to understand that it occurs in many contexts and is subject to a wide range of interpretations, with different meanings for different people. As a foundation to their understanding of health, students investigate the World Health Organization's (WHO) definition and other interpretations. They also explore the fundamental conditions required for health as stated by the WHO, which provide a social justice lens for exploring health inequities.

In this unit, students identify perspectives relating to health and wellbeing, and inquire into factors that influence health attitudes, beliefs and practices, including among Aboriginal and Torres Strait Islander Peoples. Students look at multiple dimensions of health and wellbeing, the complex interplay of influences on health outcomes and the indicators used to measure and evaluate health status. With a focus on youth, the unit equips students to consider their own health as individuals and as a cohort. They build health literacy by interpreting and using data in a research investigation into one youth health focus area, and by investigating the role of food.

### Unit 2: Management health & development

In this unit, students investigate transitions in health and wellbeing, and human development, from lifespan and societal perspectives. They explore the changes and expectations that are integral to the progression from youth to adulthood. Students apply 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 explore health literacy through an investigation of the Australian healthcare system from the perspective of youth and analyse health information. They investigate the challenges and opportunities presented by digital media 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.

### 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.

### Languages: Japanese

VCE Languages: Japanese focuses on student participation in interpersonal communication, interpreting the language of other speakers, and presenting information and ideas in Japanese on a range of themes and topics. Students develop and extend skills in listening, speaking, reading, writing, and viewing in Japanese in a range of contexts and develop cultural understanding in interpreting and creating language. Students develop their understanding of the relationships between language and culture in new contexts and consider how these relationships shape communities. Throughout the study students are given opportunities to make connections and comparisons based on personal reflections about the role of language and culture in communication and in personal identity.

### Unit 1

In this unit students develop an understanding of the language and culture/s of Japanesespeaking communities through the study of three or more topics from the prescribed themes. Students access and share useful information on the topics and subtopics through Japanese 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.

### 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. Students analyse visual, spoken, and

written texts. They access and share useful information on the topics and subtopics through Japanese and consolidate and extend vocabulary, grammar knowledge and language skills.

### Unit 3

In this unit students investigate the way Japanese speakers interpret and express ideas and negotiate and persuade in Japanese through the study of three or more subtopics from the prescribed themes and topics. Students interpret information, inform others, and reflect upon and develop persuasive arguments. They access and share useful information on the subtopics through Japanese 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 Japanese-speaking communities. They reflect on how knowledge of Japanese and Japanese-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 Japanese-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 Japanese. Students identify and reflect on cultural products or practices that provide insights into Japanese-speaking communities.

### Legal Studies

### NB: Either Legal Studies OR Business Management will run based on student interest. But probably not both.

This study is designed to enable students to:

- Develop knowledge of some of their basic legal rights, the means available to protect and assert their rights and their obligations under the law.
- Identify legal problems and how they may be resolved.
- Develop an understanding of the extent to which individuals have equality under the
- law regardless of sex, race, religion, or status
- Establish links between law-related and other problems in contemporary society, particularly within the Australian context.
- Evaluate the effectiveness of laws and recent reforms to the law and analyse current proposals for further reform and the process by which change is affected.
- Evaluate the effectiveness of the adjudicating and decision-making bodies that apply.
- and enforce the law in the Australian legal system.
- Develop the ability to research and evaluate evidence and arguments, and form reasoned conclusions.
- Develop an analytical approach to legal problem solving; and
- Develop an appreciation of the individual collective responsibility of citizens in a democratic society for the creation and operation of laws and evaluate participation in the process through which Australian society regulates its activities and reforms its laws.

### Unit 1: Guilt and Liability

Criminal law and civil law aim to achieve social cohesion and protect the rights of individuals. Criminal law is aimed at maintaining social order and infringing criminal law can result in charges. Civil law deals with the infringement of a person's or group's rights and breaching civil law can result in litigation. In this unit students develop an understanding of legal foundations, such as the different types and sources of law and the existence of a court hierarchy in Victoria. Students investigate key concepts of criminal law and civil law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime, or liable in a civil dispute. In doing so, students develop an appreciation of the way in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused, and the liability of a party in a civil dispute.

### Unit 2: Sanctions, Remedies and Rights

Criminal law and civil law aim to protect the rights of individuals. When rights are infringed, a case or dispute may arise which needs to be determined or resolved, and sanctions or remedies may be imposed. This unit focuses on the enforcement of criminal law and civil law, the methods and institutions that may be used to determine a criminal case or resolve a civil dispute, and the purposes and types of sanctions and remedies and their effectiveness.

Students undertake a detailed investigation of two criminal cases and two civil cases from the past four years to form a judgment about the ability of sanctions and remedies to achieve the principles of justice. Students develop their understanding of the way rights are protected in Australia and in another country, and possible reforms to the protection of rights. They examine a significant case in relation to the protection of rights in Australia.

### 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 Victorian legal institutions and bodies available to assist with cases.

Students explore matters 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.

They discuss recent reforms from the past four years and recommended reforms to enhance the ability of the justice system to achieve the principles of justice. Throughout this unit, students apply legal reasoning and information to actual and/or hypothetical scenarios.

### Unit 4: The people and the Law

The study of Australia's laws and legal system involves an understanding of institutions that make and reform our laws, and the relationship between the Australian people, the Australian Constitution, and law-making bodies. In this unit, students explore how the Australian Constitution establishes the law-making powers of the Commonwealth and state parliaments and 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 law reform. Throughout this unit, students apply legal reasoning and information to actual scenarios.

### Unit 1 and 2 General Mathematics

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 Units 1 and 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.

### Unit 3 and 4 General Mathematics

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 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.

## Mathematics: Mathematical Methods

### Unit 1 and 2 Mathematical methods

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, except for '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.

### Unit 3 and 4 Mathematical Methods

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.

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.

## Mathematics: Specialist

### Unit 1 and 2 Specialist

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.'

### Media

This study provides students with the opportunity to examine the media in both historical and contemporary contexts while developing skills in media design and production in a range of media forms. VCE Media provides students with the opportunity to analyse media concepts, forms, and products in an informed and critical way. Students consider narratives, technologies and processes 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 media representations, narratives, and products. VCE Media supports students to develop and refine 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 in planning and expression valuable for participation in and contribution to contemporary society. This study leads to pathways for further theoretical and/or practical 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, photography, and animation.

### Unit 1: Media forms, Representations and Australian Stories

In this unit students develop an understanding of audiences and the core concepts underpinning the construction of representations and meaning in different media forms. They explore media codes and conventions and the construction of meaning in media products.

### Unit 2: Narrative Across Media Forms

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

### Unit 3: Media Narratives, Contexts and Pre-Production

In this unit students explore stories that circulate in society through media narratives. They consider the use of media codes and conventions to structure meaning, and how this construction is influenced by the social, cultural, ideological, and institutional contexts of production, distribution, consumption, and reception. Students assess how audiences from different periods of time and contexts are engaged by, consume, and read narratives using appropriate media language.

### Unit 4: Media Production; Agency & Control in & out of 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. They refine their media production in response to feedback and through personal reflection, documenting the iterations of their production as they work towards completion.

### Music

This study enables students to:

- develop and practise musicianship.
- perform, create, arrange, improvise, analyse, recreate, reimagine, and respond to music from diverse times, places, cultures, and contexts including recently created music.
- communicate understanding of cultural, stylistic, aesthetic, and expressive qualities and characteristics of music.
- explore and strengthen personal music interests, knowledge, and experiences.
- use imagination and creativity, and personal and social skills in music making.
- access pathways to further education, training, and employment in music
- participate and present in life-long music learning and the musical life of their community.



### Unit 1: Organisation of music

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 explore and develop their understanding of the possibilities of musical organisation.

### 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, and responding to music works/examples that create different effects, students explore and develop their understanding of the possibilities of how effect can be created. Through creating their own music, they reflect this exploration and understanding.

Detailed outlines of **Units 3 and 4** can be viewed on the VCAA Website.

## Outdoor and Environmental Education

This study enables students to:

- develop experiential relationships with, and knowledge of, outdoor environments through practical experiences varying in duration
- develop an understanding of the ecological, historical, cultural, economic and social factors that have affected and will continue to affect the health of a range of different outdoor environments
- develop practical skills, knowledge and behaviours that promote safe and sustainable interaction with varied outdoor environments, both local and afar
- identify, analyse and contribute to the strategies used to protect, conserve and manage outdoor environments in a sustainable manner
- develop an understanding of historical and contemporary Indigenous peoples' relationships with outdoor environments via knowledge systems and traditional management techniques
- understand the role of environmental policy in maintaining the health of outdoor environments in Australia, including the influence of the public in shaping local, state and federal government legislation.

### Unit 1: Connections with outdoor environments

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.

Students are provided with the opportunity to explore the many ways in which nature is understood and perceived. Students develop a clear understanding of the range of motivations for interacting with outdoor environments, the factors that affect an individual's access to experiencing outdoor environments and how they connect with outdoor environments.

Through outdoor experiences, students develop practical skills and knowledge to help them act sustainably in outdoor environments. Students understand the links between practical experiences and theoretical investigations, gaining insight into a variety of responses to, and relationships with, nature.

### **Unit 2: Discovering Outdoor Environments**

This unit focuses on the different ways to understand outdoor environments and the impact of humans on outdoor environments.

In this unit 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. They comprehend a range of vocational perspectives that inform human use of outdoor environments. Through reflecting upon their experiences of outdoor environments, students make comparisons between outdoor environments, as well as develop theoretical knowledge about natural 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 consider several factors that influence relationships with outdoor environments. They also examine the dynamic nature of relationships between humans and their environment.

Students are involved in multiple experiences in outdoor environments, including in areas where there is evidence of human interaction. Through these practical experiences, students make comparisons between, and reflect upon, outdoor environments, as well as develop theoretical knowledge and skills about specific outdoor environments.

Students undertake an independent investigation into the changing relationships with, and sustainability of, at least two different visited outdoor environments across both Units 3 and 4, which is assessed in Unit 4, Outcome 3.

### Unit 4: Sustainable outdoor environments

In this unit 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 examine the importance of the sustainability of human relationships with outdoor environments and the urgent need to balance human needs and the needs of outdoor environments. They investigate current acts and conventions as well as management strategies for achieving and maintaining healthy and sustainable Australian outdoor environments in contemporary Australian society.

Students engage in multiple related experiences in outdoor environments, conducting an ongoing investigation into the health of, and care for, these places. They learn and apply the practical skills and knowledge required to sustain healthy outdoor environments and evaluate the strategies and actions they employ. Through these practical experiences, students reflect

upon outdoor environments and make comparisons between them by applying theoretical knowledge developed about outdoor environments.

As global citizens, students investigate how individuals and community members take action towards promoting sustainable and healthy outdoor environments and describe possible solutions to threats facing outdoor environments and their sustainability.

Students undertake an independent investigation into the changing relationships with, and sustainability of, at least two different visited outdoor environments across both Units 3 and 4, which is assessed in Unit 4, Outcome 3.

## Physical Education

This study enables students to:

- engage in practical activities that integrate theoretical understanding with practical application in all types and intensities of movement
- develop the knowledge and skills to critically evaluate their participation and learning in, through and about movement
- engage in practical activities to determine and analyse how the body systems work together to produce and refine movement critically evaluate trends in participation in physical activity, sport and exercise from a psychosocial perspective
- analyse movement skills from a biophysical perspective and apply relevant training principles and methods to improve performance in physical activity at an individual, club and elite level.

### 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 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 social-ecological 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.

By investigating a range of contemporary issues associated with physical activity, sport and exercise, students explore factors that affect access, inclusion, participation and performance. Students then select one issue at the local, national or global level and analyse key concepts within the issue, including investigating, participating in and prescribing movement experiences that highlight the issue. Students develop an understanding of the historical and current perspectives on the issue and consider the future implications on participation and performance.

### Unit 3: Movement Skills and Energy for Physical Activity

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).

Improvements in performance, in particular fitness, depend on the ability of the individual and/or coach to gain, apply and evaluate knowledge and understanding of training. Students assess fitness and use collected data to justify the selection of fitness tests based on the physiological requirements of an activity, including muscles used, energy systems and fitness components. Students then consider all physiological data, training principles and methods to design a training program. The effectiveness of programs is evaluated according to the needs of the individual and chronic adaptations to training.

## Physics

This study enables students to:

- apply physics models, theories, and concepts to describe, explain, analyse, and make predictions about diverse physical phenomena.
- understand and use the language and methodologies of physics to solve qualitative and quantitative problems in familiar and unfamiliar contexts.
- understand the cooperative, cumulative, evolutionary, and interdisciplinary nature of science as a human endeavour, including its possibilities, limitations, and political and sociocultural influences.
- develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory.
- develop an informed perspective on contemporary science-based issues of local and global significance.
- apply their scientific understanding to familiar and to unfamiliar situations, including personal, social, environmental, and technological contexts.
- develop attitudes that include curiosity, open-mindedness, creativity, flexibility, integrity, attention to detail and respect for evidence-based conclusions.

- understand and apply the research, ethical and safety principles that govern physics in the collection, analysis, critical evaluation and reporting of data.
- communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions, and formats.

### Unit 1: How is energy useful to society?

In this unit students examine some of the fundamental ideas and models used by physicists 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?

Students explore the power of experiments in developing models and theories making direct observations of phenomena and examine the ways in which phenomena that may not be directly observable can be explored through indirect observations. They investigate ways in which forces are involved in moving objects and in keeping objects stationary. They choose one of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound, and sports science. Students design and undertake investigations involving at least one independent, continuous variable. A student-designed practical investigation related to content drawn from Area of Study 1 and/or Area of Study 2 is undertaken in Area of Study 3.

### 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.

### 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 reimagined 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 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

### NB: Either History OR Politics will run based on student interest. But probably not both.

The study of VCE Politics develops students' ability to think politically in the context of increasing global interconnectedness and the conflicts that arise because of tensions between political stability and change. VCE Politics focuses on contemporary issues and crises. This means examples and case studies selected for study should be ongoing or have occurred within the last 10 years. In investigating national, regional, and global issues, students consider the causes and consequences of, and different perspectives on, the issues or crises; competing interests of the political actors involved; the political significance of various actors, issues, and crises; and the impact of various issues and crises on political stability and/or change. Students develop the ability to construct informed analysis of political phenomena in the society, region, and world in which they live, work and learn.

### Unit 1: Politics, Power, and Political Actors

In this unit, students learn that politics is about how political actors use power to resolve issues and conflicts over how society should operate. Each area of study focuses on concepts that form essential disciplinary knowledge, and which allow students to gradually build on their understanding of what it is to think politically.

Political actors are individuals such as political leaders or ordinary citizens, or organisations such as parliaments or the United Nations, who have some measure of political power and/or authority and who engage in activities that can have a significant influence on decisions, policies, public discussion, media coverage and outcomes associated with a given issue. They may be local, national, regional, or global.

### Unit 2: Democracy: Stability and Change

In this unit, students investigate the key principles of democracy and assess the degree to which these principles are expressed, experienced, and challenged, in Australia and internationally. They consider democratic principles in the Australian context and complete an in-depth study of a political issue or crisis that inherently challenges basic democratic ideas or practice. Students also investigate the degree to which global political actors and trends can challenge, inhibit, or undermine democracy, and evaluate the political significance of these challenges. Each area of study focuses on concepts that form essential disciplinary knowledge, and which allow students to gradually build on their understanding of what it is to think politically.

### Unit 3: Global Cooperation and Conflict

In this unit, students investigate an issue and a crisis that pose challenges to the global community. Students begin with an investigation into an issue of global scale, such as climate change, global economic instability, the issue of development or weapons of mass destruction. Students also examine the causes and consequences of a humanitarian crisis that may have begun in one state, but which has crossed over into neighbouring states and requires an emergency response. This crisis must be chosen from the areas of human rights, armed conflict, and the mass movement of people. They consider the causes of these issues and crises and investigate their consequences on a global level and for a variety of global factors.

### Unit 4: Power in the Indo-Pacific

In this unit, students investigate the strategic competition for power and influence in the Indo-Pacific region. They consider the interests and perspectives of global actors within the region, including the challenges to regional cooperation and stability. Building on their study of global issues and contemporary crises in Unit 3, students develop their understanding of power and national interests through an in-depth examination of one state's perspectives, interests, and actions. Students must choose one state from the People's Republic of China, Japan, the Republic of India, the Republic of Indonesia, or the United States of America. Students also examine Australia's strategic interests and actions in the region and consider how Australia's responses to regional issues and crises may have contributed to political stability and/or change. They do this within the context of Australia's relationships with one Pacific Island state and two other regional states.

## Product Design and Technology: (Textiles/Wood)

Product design is a solution-focused approach that engages with the diverse needs and opportunities of individuals, society, and the environment in which we live. Product designers aim to improve welfare, which includes quality of life, by designing innovative and ethical solutions. Product design is enhanced through knowledge of social, technological, economic, historical, ethical, legal, environmental, and cultural factors. These factors influence the form, function, and aesthetics of products.

### Unit 1: Design practices

This unit focuses on the work of designers across relevant specialisations in product design. Students explore how designers collaborate and work in teams; they consider the processes that designers use to conduct research and the techniques they employ to generate ideas and design products. In doing this, they practise using their critical, creative, and speculative thinking strategies. When creating their own designs, students use appropriate drawing systems – both manual and digital – to develop graphical product concepts. They also experiment with materials, tools and processes to prototype and propose physical product concepts.

### Unit 2: Positive impacts for end users

Designers should look outward, both locally and globally, to research the diverse needs of end users. They should explore how inclusive product design solutions can support belonging, access, usability, and equity. In this unit, students specifically examine social and/or physical influences on design. They formulate a profile of an end user(s), research and explore the specific needs or opportunities of the end user(s) and make an inclusive product that has a positive impact on belonging, access, usability and/or equity.

### Unit 3: Ethical product design and development

In this unit students research a real personal, local, or global need or opportunity with explicit links to ethical considerations. They conduct research to generate product concepts and a final proof of concept for a product solution that addresses the need(s) or opportunities of the end user(s). Product designers respond to current and future social, economic, environmental, or other ethical considerations. This unit focuses on the analysis of available materials in relation to sustainable practices, tensions between manufacturing and production, modern industrial and commercial practices, and the lifecycles of products from sustainability or worldview perspectives.

### Unit 4: Production and evaluation of ethical designs

In this unit students continue to work as designers throughout the production process. They observe safe work practices in their chosen design specialisations by refining their production skills using a range of materials, tools, and processes.

Students collect, analyse, interpret, and present data, use ethical research methods, and engage with end user(s) to gain feedback and apply their research and findings to the production of their designed solution. Students also focus on how speculative design thinking can encourage research, product development and entrepreneurial activity through the

investigation and analysis of examples of current, emerging, and future technologies and market trends.

## Psychology

This study enables students to:

- develop knowledge and understanding of psychological models, theories, and concepts to describe, explain, analyse, and predict human thoughts, emotions, and behaviour.
- understand and apply a biopsychosocial approach to human thoughts, emotions, and behaviour.
- apply psychological models, theories and/or concepts to everyday situations to enhance understanding of mental wellbeing.
- and more broadly to:
- develop attitudes that include curiosity, open-mindedness, creativity, flexibility, integrity, attention to detail and respect for evidence-based conclusions and Aboriginal and Torres Strait Islander knowledges.
- develop an understanding of the cooperative, cumulative, iterative, and interdisciplinary nature of science as a human endeavour, including its possibilities, limitations and sociocultural, economic, political, and legal influences and consequences.
- develop a range of individual and collaborative science inquiry skills through a variety of investigation methodologies in the laboratory and field, refining investigations to improve data quality.
- understand the research, ethical and safety guidelines that govern the study and practice of the discipline and apply these guidelines to generate, collate, analyse, critically evaluate, and report data.
- analyse and interpret qualitative and quantitative data to provide evidence, recognising patterns, relationships, and limitations of data.
- develop an informed and critical perspective, as local and global citizens, on contemporary science-based issues.
- develop knowledge and understanding of key models, concepts, theories, and laws of science to explain scientific processes and phenomena, and apply this understanding in familiar and unfamiliar situations, including personal, sociocultural, environmental, and technological contexts.
- communicate clearly and accurately an understanding of the discipline, using appropriate terminology, conventions, and formats.

### 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.

### Unit 2: How do internal and external factors influence behaviour and metal 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.

### 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.

### 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 non-rapid 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.

# Religion and Society

In Religion and Society, students undertake a general study of religion and its interaction with society in the past and the present. They study specific religious traditions or religious denominations in societies where multiple worldviews coexist and consider the experiences of members as those members engage with their religious tradition individually and communally. This study respects and encourages an open and objective inquiry, without partiality towards any one religion.

### Unit 1: The Role of Religion in Society

In this unit students explore the spiritual origins of religion and understand its role in the development of society, identifying the nature and purpose of religion over time. They investigate religion, including the totality of phenomena to which the term 'religion' refers, and acknowledge religion's contribution to the development of human society. They also focus on the role of spiritualities, religious traditions and religious denominations in shaping personal and group identity over time. Students examine how individuals, groups and new ideas have affected and continue to affect spiritualities, religious traditions and religious denominations. The unit provides an opportunity for students to understand the often-complex relationships that exist between individuals, groups, new ideas, truth narratives, spiritualities and religious traditions broadly and in the Australian society in which they live.

### Unit 2: Religion and Ethics

How do we know what is good? How do we make decisions in situations where it is unclear what is good or not good? Do we accept what society defines as good? Do we do what feels right? Or do we rely on a definition of what is good from a spirituality, religious tradition, or religious denomination? What are the principles that guide decision-making? Ethics is concerned with discovering the perspectives that guide practical moral judgment. Studying ethics involves identifying the arguments and analysing the reasoning, and any other influences, behind these perspectives and moral judgments. An important influence on ethical perspective is the method of ethical decision-making, made up of concepts, principles, and theories.

### Unit 3: The Search for Meaning

Over time and across cultures humanity has sought to understand the why and how of existence. In this quest for meaning humans have consistently posed big questions of life such as: Where did we come from? Is there someone or something greater than us – an ultimate reality? What is the purpose of our existence? How should we live? Is there anything beyond death? In response to this search for meaning, various spiritual, religious, philosophical, scientific, and ideological worldviews have been developed. Religion has developed answers in the form of a truth narrative: various beliefs and other aspects that have offered ways of establishing meaning, not only for human existence but also for all that exists. The aspects of religion also attempt to express and explain the nature of relationships between humans individually and collectively, between humans and ultimate reality and between humans and the rest of the natural world.

### Unit 4: Religion, Challenge and Change

This unit focuses on the interaction over time of religious traditions and religious denominations and the societies of which they are a part. For a large part of human history religion has been drawn on as a truth narrative, offering a means for finding answers to the big questions of life. Religious traditions and religious denominations are in a dynamic process of engagement and negotiation with members individually and collectively, as well as with other key institutions in wider society associated with power, authority, and credibility. Religious traditions and religious denominations are living institutions that interact with society and can likewise be influenced by society. They can stimulate and support society, acting as levers for change themselves and embracing or resisting forces for change within society.

# Sociology

Sociology focuses on the study of human behaviour and social interaction to understand how societies are organised, develop and change. There is no single sociological perspective, rather, there are several theories that offer different ways of understanding human society. Sociologists use these theories and frameworks in a complementary way to attempt to objectively examine social issues and explain concepts. In VCE Sociology students examine key theories regarding family, deviance, ethnicity, community and social movements.

### Unit 1: Youth and family

This unit uses sociological methodology to explore the social category of youth and the social institution of family. Sociologists draw on methods of science to understand how and why people behave the way they do when they interact in a group. Sociology attempts to understand human society from a holistic point of view, including consideration of society's composition, how it is reproduced over time and the differences between societies. When sociologists investigate a topic, they attempt to do so with a reflective, critical mindset. Sociologists are guided by theories, or frameworks, to explain and analyse how social action, social processes and social structures work.

### Unit 2: Social norms: breaking the code

In this unit students explore the concepts of deviance and crime. The study of these concepts from a sociological perspective involves ascertaining the types and degree of rule breaking behaviour, examining traditional views of criminality and deviance and analysing why people commit crimes or engage in deviant behaviour. It also involves consideration of the justice system, how the understanding of crime and deviance has changed over time, and the relationship between crime and other aspects of a society, such as gender and ethnicity.

### Unit 3: Culture and ethnicity

This unit explores expressions of culture and ethnicity within Australian society in two different contexts – Australian Indigenous culture, and ethnicity in relation to migrant groups. Area of Study 1 involves a critical exploration of the historical suppression of, and increasing public awareness of, Australian Indigenous culture. This requires some knowledge of the past and its influence on subsequent generations, as well as knowledge of contemporary factors that may be supporting and/or limiting increasing awareness of Australian Indigenous culture. Indigenous and non-indigenous perspectives and responses are integral to the area of study.

### Unit 4: Community, social movements and social change

In this unit students explore the ways sociologists have thought about the idea of community and how the various types of community are experienced. They examine the relationship between social movements and social change.
## NB: Either Drama or Theatre Studies would run based on student interest, but not both.

This study enables students to:

- acquire knowledge of theatre including its styles, purposes, and audiences
- interpret scripts through engagement in the production process.
- experiment creatively and imaginatively with theatrical possibilities and elements of theatre composition
- apply knowledge of production roles and the skills to interpret scripts.
- understand themselves as theatre practitioners and audience.
- appreciate theatre and its significance as an art form.
- apply safe and ethical personal and interpersonal practices in theatre production.
- conduct performance analysis and production evaluations and apply learning to their own theatre production work.
- apply thinking, problem-solving and communication skills to creatively participate in the theatre life of their community.

### Unit 1: Pre-modern theatre styles and Conventions

This unit focuses on the application of acting, direction and design in relation to theatre styles from the pre-modern era, that is, works prior to the 1920s. Students creatively and imaginatively work in production roles with scripts from the pre-modern era of theatre, focusing on at least three distinct theatre styles and their conventions. They study innovations in theatre production in the pre-modern era and apply this knowledge to their own works. Students develop knowledge and skills about theatre production processes including dramaturgy, planning, development, and performance to an audience and apply this to their work.

#### Unit 2: Modern theatre styles and Conventions

This unit focuses on the application of acting, direction and design in relation to theatre styles from the modern era, that is, the 1920s to the present. Students creatively and imaginatively work in production roles with scripts from the modern era of theatre, focusing on at least three distinct theatre styles. They study innovations in theatre production in the modern era and apply this knowledge to their own works. Students develop knowledge and skills about theatre production processes including dramaturgy, planning, development, and performance to an audience and apply this to their work. They study safe and ethical working practices in theatre production and develop skills of performance analysis, which they apply to the analysis of a play in performance.

## Unit 3: Producing Theatre

In this unit students develop an interpretation of a script through the three stages of the theatre production process: planning, development, and presentation. Students specialise in two production roles, working collaboratively, creatively, and imaginatively to realise the production of a script. They use knowledge developed during this process to analyse and evaluate the ways work in production roles can be used to interpret script excerpts previously unstudied. Students develop knowledge and apply elements of theatre composition, and safe and ethical working practices in the theatre.

#### Unit 4: Presenting an Interpretation

In this unit students study a scene and an associated monologue. They initially develop an interpretation of the prescribed scene. This work includes exploring theatrical possibilities and using dramaturgy across the three stages of the production process. Students then develop a creative and imaginative interpretation of the monologue that is embedded in the specified scene. To realise their interpretation, they work in production roles as an actor and director, or as a designer.

# Visual Communication Design

Visual Communication Design is distinct in its study of visual language and the role it plays in communicating ideas, solving problems, and influencing behaviours. Students learn how to manipulate type and imagery when designing for specific contexts, purposes, and audiences. They choose and combine manual and digital methods, media and materials with design elements and principles. In doing so, students learn how aesthetic considerations contribute to the effective communication and resolution of design ideas, and how an understanding of visual language, its role and potential is the foundation of effective design practice.

The study is made up of four units.

- Unit 1: Finding, reframing, and resolving design problems
- Unit 2: Design contexts and connections
- Unit 3: Visual communication in design practice
- Unit 4: Delivering design solutions

## Unit 1: Finding, Reframing, and Resolving Design Problems

In this unit students are introduced to the practices and processes used by designers to identify, reframe, and resolve human-centred design problems. They learn how design can improve life and living for people, communities, and societies, and how understandings of good design have changed over time. Students learn the value of human-centred research methods, working collaboratively to discover design problems and understand the perspectives of stakeholders. They draw on these new insights to determine communication needs and prepare design criteria in the form of a brief.

## Unit 2: Design Contexts and Connections

Unit 2 builds on understandings of visual communication practices developed in Unit 1. Students draw on conceptions of good design, human-centred research methods and influential design factors as they revisit the VCD design process, applying the model in its entirety. Practical tasks across the unit focus on the design of environments and interactive experiences. Students adopt the practices of design specialists working in fields such as architecture, landscape architecture and interior design, while discovering the role of the interactive designer in the realm of user-experience (UX). Methods, media, and materials are explored together with the design elements and principles, as students develop spaces and interfaces that respond to both contextual factors and user needs.

## Unit 3: Visual Communication in Design Practice

In this unit students explore and experience the ways in which designers work, while also analysing the work that they design. Through a study of contemporary designers practising in one or more fields of design practice, students gain deep insights into the processes used to design messages, objects, environments and/or interactive experiences. They compare the contexts in which designers work, together with their relationships, responsibilities and the role of visual language when communicating and resolving design ideas. Students also identify the obligations and factors that influence the changing nature of professional design practice, while developing their own practical skills in relevant visual communication practices.

## Unit 4: Delivering Design Solutions.

In this unit students continue to explore the VCD design process, resolving design concepts and presenting solutions for two distinct communication needs. Ideas developed in Unit 3, Outcome 3 are evaluated, selected, refined, and shared with others for further review. An iterative cycle is undertaken as students rework ideas, revisit research and review design criteria defined in the brief. Manual and digital methods, media and materials are explored together with design elements and principles, and concepts tested using models, mock-ups, or low-fidelity prototypes.

# VCE VM: Literacy

This subject 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. Texts will be from a wide range of contexts and will focus on participating in the workplace and community. Further to this, texts will be drawn from a range of sources including media texts, multimodal texts, texts used in daily interactions, and workplace texts from increasingly complex and unfamiliar settings.

#### Unit 1: Area of study

- Literacy for personal use
- Understanding and creating digital texts

#### Unit 2: Area of Study

- Understanding issues and voices
- Responding to opinions

#### Unit 3: Area of Study

- Accessing and understanding informational, organisational and procedural texts
- Creating and responding to organisational, informational or procedural texts

#### Unit 4: Area of Study

- Understanding and engaging with literacy for advocacy
- Speaking to advise, or to advocate.

VM Literacy has been designed so that Units 1 and 2 can be undertaken as standalone units or concurrently. There are no prerequisites for entry into Units 1 and 2. Units 3 and 4 will be undertaken sequentially.

## VCE VM: Numeracy

This course focuses on enabling students to develop and enhance their numeracy skills to make sense of their personal, public and vocational lives. Students develop mathematical skills with consideration of their local, national, and global environments and contexts, and an awareness and use of appropriate technologies.

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.

The course will be based on applied learning, this incorporates the teaching of skills and knowledge in the context of 'real life' experiences. Students will apply what they have learnt by doing, experiencing, and relating acquired skills to the real world. Applied learning teaching and practice ensures that what is learnt in the classroom is connected to scenarios and experiences outside the classroom and makes that connection as immediate and transparent as possible.

#### Unit 1:

- Personal Numeracy; Number, quantity and measures
- Recreational Numeracy: Number, shape
- Health Numeracy: Quantity and measures and relationships.

#### Unit 2:

- Civic Numeracy: Data, systematics
- Vocational Numeracy: Dimension and direction, systematics
- Financial Numeracy: data, uncertainty, systematics

### Unit 3:

- Personal Numeracy: Shape, quantity and measures
- Vocational Numeracy: Number, relationships
- Financial Numeracy: Number, quantity and measures

#### Unit 4:

- Civic Numeracy: Data, systematics
- Health Numeracy: Dimension and direction
- Recreational Numeracy: Data, uncertainty

VM Numeracy has been designed so that Units 1 and 2 can be undertaken as stand-alone units or concurrently. Units 3 and 4 may be undertaken sequentially.

## VCE VM: Personal Development

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.

Personal Development Skills explores concepts of effective leadership, self-management, project planning and teamwork to support students to engage in their work, community, and personal environment. Through self-reflection, independent research, critical and creative thinking and collaborative action, students will extend their capacity to understand and connect with the world they live in, and build their potential to be resilient, capable citizens.

#### **Unit 1: Healthy Individuals**

- Personal Identity and Emotional Intelligence
- Community health and wellbeing.
- Promoting a healthy lifestyle

#### Unit 2: Connecting with Community

- What is Community?
- Community cohesion
- Engaging and supporting community

#### **Unit 3: Leadership and Teamwork**

- Social awareness and interpersonal skills
- Effective leadership
- Effective teamwork

## Unit 4: Community Project

- Planning a community project
- Implementing the community project
- Evaluating the community project

VM Personal Development Skills has been designed so that Units 1 and 2 can be undertaken as standalone units or concurrently. Units 3 and 4 may be undertaken sequentially.

# VCE VM: Work Related Skills

VCE Vocational Major Work-Related Skills (WRS) examines a range of skills, knowledge, and capabilities relevant to achieving individual career and educational goals. Students will develop a broad understanding of workplace environments and the future of work and education, to engage in theoretical and practical planning and decision-making for a successful transition to their desired pathway.

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.

Students will have the opportunity to apply the knowledge and skills gained from this study in the classroom environment and through Structured Workplace Learning (SWL).

There are no prerequisites for entry into Units 1 and 2. Units 3 and 4 will be undertaken sequentially. This study is made up of four units.

#### Unit 1: Careers and Learning for the Future: Areas of Study

- Future careers
- Presentation of career and educational goals

#### Unit 2: Workplace Skills and Capabilities: Areas of Study

- Skills and capabilities for employment and further education
- Transferable skills and capabilities

#### Unit 3: Industrial Relations, Workplace Environment and Practice: Areas of Study

- Workplace well-being and personal accountability
- Workplace responsibilities and rights

#### Unit 4: Portfolio Preparation and Presentation: Areas of Study

- Portfolio development
- Portfolio presentation

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.

