



The Grange

P-12 COLLEGE

SUBJECT SELECTION HANDBOOK

YEARS 10, 11 & 12

2027

Your journey.

Your future.



DISCOVER
your interests



EXPLORE
your pathways



DEVELOP
your potential



ACHIEVE
your goals

RESPECT | LEARNING | WORKING TOGETHER



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Introduction

The Victorian Certificate of Education (VCE), the Victorian Certificate of Education - Vocational Major (VCE VM) are conducted under the auspices of the Victorian Curriculum and Assessment Authority (VCAA). Completion of the VCE and VCE VM may lead to a variety of future options including employment and/ or further study at TAFE or University.

Choosing an appropriate course can be a challenging task. This handbook is intended to assist students and parents to explore the many options available at The Grange P-12 College. We strongly encourage students entering the senior years of schooling to select subjects for which they have demonstrated a strong interest and clear capabilities. The VCE and VCE VM reflect the College's commitment to academic rigour, and we strive to achieve results that exemplifies excellence for that student.

To that end we will guide students into courses that are appropriate to them and will be proactive in ensuring their capacity to undertake selected studies or combinations of subjects prior to the commencement of their final years.

Students and parents/ carers need to be aware that the move into senior secondary education has additional responsibilities for students and increased expectations. The Grange P-12 College provides course selection and careers advice to students, however, it is important that, before committing to a particular senior course, students and parents avail themselves of other information beyond this guide. These additional sources may include past and present students, current teachers, other parents, employer groups, tertiary institutions and career centres.

Subject selection handbooks (Years 7 – 9 and Years 10 – 12) contains a comprehensive outline of curriculum areas and subject offerings at The Grange P-12 College. The Sports Science Academy (SSA) sits within Years 7-9 and Years 10-12.

The handbooks are arranged in the following ways:

Years 7 – 9: Outlines the core subjects that students will complete throughout the year across each discipline in line with the Victorian Curriculum. At the Year 9 level, students are presented with a range of core (compulsory) and elective subjects. The elective subjects are designed to provide students with a range of experiences that may lead to further specialisation during later years of study.

Years 10 - 12: Year 10 students are presented with a range of core (compulsory) and elective subjects. The elective subjects are intended to provide students with a range of experiences that may lead to further specialisation during the later years of study. Some Year 10 students may also be engaged in the early commencement program that sees them complete a VCE Unit 1 and 2. The Year 11 and 12 sections contain information about the Victorian Certificate of Education (VCE), the Victorian Certificate of Education – Vocational Major (VM), Victorian Pathways Certificate (VPC) and Vocational Education and Training (VET) studies for students. Parents and students are encouraged to select combinations of subjects that lead to their intended career and post – compulsory studies at tertiary institutions.

Please note that the full suite of subjects and elective programs from Years 10-12 presented in these handbooks are held subject to availability and demand from students.

Selecting a Year 10, 11 or 12 programs do not guarantee promotion to that year level. This will be dependent upon meeting assessment standards, meeting eligibility requirements of a program, meeting the minimum prerequisites for VET and the college's attendance requirements.

Year 10 Curriculum

The Year 10 curriculum is designed to provide students with a comprehensive range of subjects based on the Victorian Curriculum F–10, which incorporates the Australian Curriculum and reflects Victorian priorities and standards. The curriculum is the common set of knowledge and skills required by all students for life-long learning, social development, and active and informed citizenship. Students in Year 10 also have the opportunity, subject to availability, to study a VCE subject. The High Achievers program and the Sports Science Academy program are also offered at this level to further enrich and address diverse student needs.

Learning options available at Year 10

Core subjects	Semester Electives		Sports Science	STEM Academy
English	Introduction to Health & PE	Introduction to VCE Visual Communication Design	English	English
Mathematics	Introduction to Food Studies	Introduction to Art Making and Exhibiting	Mathematics	Mathematics
Science	Introduction to General Mathematics	Introduction to Environmental Science	Science	Science
Humanities	Introduction to Mathematical Methods	Introduction to VCE Media	Humanities	Humanities
	Introduction to VCE Physics and Chemistry	Introduction to VCE Biology	Sports Science Foundations of Physical Education (Full Year)	STEM Foundations – Innovation and Inquiry (Full Year)
	Introduction to VCE Psychology	Introduction to VCE Legal Studies		
	Introduction to VCE Geography	Police and Australian Defence Force Career Preparation		
	Introduction to VCE History	STEM		

Students study 6 subjects each Semester.
Core Subjects – English, Maths, Science, Humanities
Electives - 2 per Semester (4 per year)

*Student can apply to take an accelerated subject (Unit 1- Year 11 subject) based on availability and Year 9 achievements.

YEAR 10

English

CORE

The Year 10 English curriculum is built around the three connected strands of Language, Literature and Literacy. Together the strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking, writing, and creating. Students engage with a variety of texts for enjoyment. They interpret, create, evaluate, discuss, and perform a wide range of literary texts in which the primary purpose is aesthetic, as well as texts designed to inform and persuade. Students will study a variety of texts, including newspapers, film and digital texts, fiction, nonfiction, poetry, dramatic performances, and multimodal texts. Students develop critical understanding of the contemporary media, and the differences between media texts.

What will I Learn?

- ° Students evaluate how text structures can be used in innovative ways by different authors.
- ° Students explain how the choice of language features, images and vocabulary contributes to the development of individual style.
- ° Students develop and justify their own interpretation of texts.
- ° Students explain different viewpoints, attitudes and perspectives through the development of cohesive and logical arguments.
- ° Students develop their own writing style by experimenting with language features, stylistic devices, text structures and images.
- ° Students create a wide range of texts to articulate complex ideas.

What types of things will I do?

- ° Reading and Viewing
- ° Oral presentations
- ° Analysing texts
- ° Writing
- ° Speaking and Listening
- ° Extended writing tasks

Where can this lead me?

Career Outcomes

- ° Journalism and media
- ° Publishing and Creative Writing
- ° Professional Writing and Editing
- ° Advertising and Marketing
- ° Government and Public Service

Course Pathways

VCE English, EAL
Vocational Major Literacy

Mathematics

Year 10 Mathematics builds on each student's prior learning and experiences and provides the basis for a pathway towards VCE Foundation Mathematics, General Mathematics, Mathematics Methods CAS, Vocational Major (VM) Numeracy or Victorian Pathway Certificate (VPC).

The Year 10 Mathematics curriculum is organised into six interrelated strands of Number, Algebra, Measurement, Space, Statistics and Probability.

The curriculum is focused around the four elements of Proficiency in Mathematics - Understanding, Fluency and Problem Solving and Reasoning. Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.

What will I Learn?

Students study patterns, skills applications, and concepts within the six strands of:

- ° Number
- ° Algebra
- ° Measurement
- ° Space
- ° Statistics
- ° Probability

What types of things will I do?

- ° Number skill development
- ° Measurement and Geometry focused on applications of skills in practical situations
- ° Probability understanding and utilisation of interpretation of events and data
- ° Algebra skills adapting to providing solutions
- ° Statistics development and focus on 'real world' issues

Where can this lead me?

Career Outcomes

- ° Nursing
- ° Physiotherapy
- ° Medicine
- ° Teaching
- ° Engineering
- ° Health

Course Pathways

This pathway provides a solid preparation for VCE Foundation Mathematics, General Mathematics, Mathematical Methods and Vocational Major Numeracy

YEAR 10 Science

CORE

Science is the study of how things work in the physical and natural world. In this Year 10 course, we learn: how to harness chemical reactions, the fundamentals of genetics and the evolution of organisms, how forces and energy interact in moving objects, how advancements in technology are changing what we know about the Universe and how the world around us is part of a delicate ecosystem. We also learn how to conduct scientific experiments and perform in depth analyses and evaluations of scientific claims. All topics have a focus on real-world applications.

This subject prepares students with the scientific literacy to be able to make informed decisions as a global citizen as well as the scientific fundamentals to be able to progress to VCE science subjects.

What will I Learn?

Students will learn about these topics in Science:

- ° Biology – Evolution and Genetics
- ° Chemistry – Chemical Reactions
- ° Earth and Space Science – Space and Celestial Objects
- ° Physics – Energy Transfer and Transformation

What types of things will I do?

- ° Discover fascinating science concepts through a variety of activities including talks, videos, hands-on activities, independent and group work
- ° Conduct and observe a range of experiments, both inside and outside the science laboratory
- ° Plan a variety of investigations and experiments
- ° Undertake at least one research project similar to a VCE research task.

Where can this lead me?

Career Outcomes

- ° Scientist
- ° Doctor
- ° Engineer
- ° Nurse
- ° Marine Biologist
- ° Vet or Vet Nurse
- ° Teacher
- ° Physiotherapist

Course Pathways

VCE

Biology
Chemistry
Physics
Psychology

Humanities

The Year 10 Humanities Curriculum has been designed to assist learners to navigate our 21st Century information-rich world and to gain important background knowledge about our collective past, present, and future. Students will consider the causes, key events and effects of the Second World War. They will also learn about the methods used by Indigenous civil rights activists to advocate for rights and freedoms in Australia. In Geography, students explore worldwide variations in human wellbeing and in economic development, considering the many reasons for such variations including colonialism and conflict. Lastly, in Civics, students turn to Global Governance to learn about the important role Australia plays on the international stage.

What will I Learn?

- ° History – Second World War in Europe and the Holocaust
- ° History – Rights and Freedoms
- ° Civics/Economics – Global Governance
- ° Geography – Geographies of Human Wellbeing
- ° Research and media literacy skills
- ° Intercultural understanding and ethical reasoning

What types of things will I do?

- ° Interrogate sources of evidence including contemporary media
- ° Meet a Holocaust survivor: a witness to History
- ° Participate in virtual fieldwork
- ° Take part in a mock United Nations General Assembly
- ° Learnt to base my arguments on relevant and accurate evidence
- ° Participate in online discussion boards and virtual tours/experiences

Where can this lead me?

Career Outcomes

- ° Politician
- ° Lawyer
- ° Financial Advisor
- ° Historian
- ° Journalist
- ° Information Officer
- ° Academic/Teacher
- ° Environmental planner
- ° Researcher or Archivist

Course Pathways

- VCE
- Business Management
- Legal Studies
- Geography
- History



YEAR 10

FULL YEAR SUBJECT

Sports Science

FOUNDATIONS OF PHYSICAL EDUCATION

This course is run across the whole year for Sports Science Academy students. In Foundations of Physical Education, students examine the biological, social and cultural influences on performance and participation in physical activity. Topics that are covered include body systems of musculoskeletal and cardiorespiratory along with training to improve performance. Student Athletes also complete physical training sessions to further understand the influence physical activity has on health and wellbeing of individuals. This semester subject is an appropriate introduction to VCE Physical Education.

What will I Learn?

- Cardiorespiratory system
- Training Principles
- Strength and Conditioning movements
- Improving performance for health goals
- Musculoskeletal system
- Energy Systems
- Rehabilitation training – progressing and regressing movement patterns

What types of things will I do?

- Class debates
- Engage and participate in class discussions
- Learn about the benefits of physical activity
- Relate theoretical knowledge to practical settings
- Strength and conditioning sessions
- Analyse case studies based on real life scenarios
- Develop physical fitness
- Engage in practicals involving fitness testing equipment

Where can this lead me?

Career Outcomes

- Personal Trainer
- Professional Athlete
- Sports Marketing
- Nutritionist
- Exercise Science
- Strength & Conditioning Coach

- Health Promotion
- Sports Medicine
- Sport Psychologist
- Nurse
- Family Studies
- Nutrition / Dietetics

Course Pathways

- | | |
|-----|----------------------------|
| VCE | Physical Education |
| | Health & Human Development |
| VET | VET Sport & Recreation |

Introduction to Health & Physical Education

In introduction to Health and Physical Education students will gain an understanding of the knowledge and skills involved in the VCE subjects' Health and Human Development and Physical Education.

What will I Learn?

In Health Education students will explore the concept of health and wellbeing, health status indicators and nutrition.

In Physical Education students will discover the structure, function and effects of exercise on the cardiovascular, respiratory and energy systems.

What types of things will I do?

- Discover the role the heart and lungs perform during exercise
- Investigate how the bodies 3 energy systems interplay
- Test how your body responds to exercise
- Relate theoretical knowledge to physical activity
- Discover the 5 dimensions of health
- Learn how to measure health
- Investigate how healthy Australia is
- Learn about macro and micronutrients

Where can this lead me?

Career Outcomes

- Personal Trainer
- Professional Athlete
- Sports Marketing
- Nurse
- Family Studies
- Nutrition / Dietetics

Course Pathways

- | | | |
|---------------------------------|-----|----------------------------|
| ◦ Youth Counsellor | VCE | Physical Education |
| ◦ Sports Medicine | | Health & Human Development |
| ◦ Sport Psychologist | VET | Sport & Recreation |
| ◦ Exercise Science | | |
| ◦ Strength & Conditioning Coach | | |
| ◦ Health Promotion | | |

Introduction to Food Studies

In this unit, students will investigate ways foods change at a molecular level to create the dishes we like to eat. They will use the design process to create sustainable dishes based on a range of different cooking techniques while maintaining ethical standards. Students will investigate ways in which the food industry produce food and the food wastage that abounds in our everyday consumer lifestyles.

What will I Learn?

- ° Food science
- ° How and why foods change when cooked
- ° To design food using a science-based approach
- ° Sustainability in the food industry
- ° How food affects your health

What types of things will I do?

- ° Prepare food products in a safe and hygienic manner
- ° Cook a wide variety of food products
- ° Investigate ways to reduce food waste
- ° Undertake design briefs to plan and prepare food products
- ° Look at ethics in food production

Where can this lead me?

Career Outcomes

- ° Chef
- ° Nutritionist
- ° Health
- ° Hospitality
- ° Education
- ° Patisserie
- ° Catering
- ° Events

Course Pathways

VET

Dual Certificate
Hospitality/Cookery
Refer to VET cluster

YEAR 10

Introduction to General Mathematics

The Year 10 Introduction to General Mathematics course provides students with an introduction to the key topics in VCE General Mathematics, Units 1 and 2. The main topics in this course include matrices, graphs and networks and data. The skills gained in this elective will support students in consolidating their core mathematical skills within the topics studied and will assist students in developing independence in their mathematics knowledge leading into VCE General Mathematics topics. This elective course aims to support students in bridging the gaps in their knowledge, helping to boost students' confidence in their own skills. This course will also provide students with the skills necessary to pursue VCE Foundation Mathematics and/or VCE General Mathematics in Year 11. In summary, this elective is designed to strengthen and review key mathematical skills to ensure students' have a strong knowledge base and the confidence to progress toward VCE Mathematics subjects.

What will I Learn?

The mathematical tasks are designed to develop the following skills:

- ° Consolidation of core mathematical skills through individual work, feedback, self-reflection, and support
- ° Functionalities of CAS calculator and plotting data
- ° A positive attitude towards Mathematics

What types of things will I do?

- | | |
|------------------------------|------------------------|
| ° Core mathematical concepts | ° Calculating |
| ° Thinking | ° Consolidating |
| ° Discussing | ° Enjoying Mathematics |

Where can this lead me?

Career Outcomes

- ° Accounting
- ° Architecture
- ° Commerce
- ° Nursing
- ° Business Management
- ° Information Technology
- ° Building Trades

Course Pathways

VCE Foundation Mathematics
or VCE General Mathematics in Year 11.

YEAR 10

Introduction to Mathematical Methods

The Introduction to Mathematical Methods course is recommended for students who want to extend their knowledge of mathematics beyond the standard Year 10 Mathematics curriculum. The subject explores more complex skills in mathematics, such as advanced algebra and graphing. It is important to note that this course is structured beyond the scope of standard Year 10 mathematics and as such, there will be an increase in workload and conceptual complexity. The elective is an excellent course for students considering a higher-level mathematics course in VCE, such as VCE Mathematical Methods. Students with aspirations to select Year 11 Mathematical Methods are strongly recommended to complete this elective. Mathematical Methods is a select entry elective. Students will be required to complete an entry test to determine eligibility.

What will I Learn?

- ° Advanced algebra and graphing
- ° Applied problem solving
- ° Conceptualising practical problems
- ° Technology (CAS)

What types of things will I do?

- ° Application of functions
- ° Digital Learning
- ° Practical applications of concepts
- ° Analysis of mathematical problems

Where can this lead me?

Career Outcomes

- ° Medicine
- ° Biomedicine
- ° Aviation
- ° Teaching
- ° Engineering
- ° Health
- ° Veterinary Science

Course Pathways

VCE Mathematical Methods in Year 11

Introduction to VCE Physics and Chemistry

At the completion of the Physics unit, students will be able to investigate and apply a basic DC circuit model to simple battery-operated devices and household electrical systems, apply mathematical models to analyse circuits, and describe the safe and effective use of electricity by individuals and the community.

At the completion of the Chemistry unit, students will be able to write and balance chemical equations, calculate mole quantities, apply Avogadro's constant as the number 6.02×10^{23} indicating the number of atoms or molecules in a mole of any substance, understand the properties of acid-base reactions, write equations for acid-base reactions, and apply concepts including pH as a measure of acidity.

What will I Learn?

- ° Core concepts and skills related to the topics of electric circuits and that are useful in VCE physics (using formulas, rearranging the formulas and the use of appropriate units).
- ° Core concepts and skills related to the topics of the chemical bonding, chemical reactions and quantifying chemicals, that are useful in VCE chemistry (writing and naming chemicals using formulas, writing balanced equations and using mathematical relationships/formulas linking chemical quantities).
- ° Key Scientific skills around research tasks and practical investigations that are essential for all VCE science subjects
- ° Practice investigation skills in a variety of practical activities and present the findings in appropriate formats

What types of things will I do?

- ° A range of practical and theory activities on core topics
- ° Practical Investigation on Ohms' Law.
- ° Investigative Research Task based on a given Topic/Question.
- ° Investigative Research and writing a report/presentation.
- ° Acid-base titrations.

Where can this lead me?

Career Outcomes

- ° Data Scientist
- ° Medical or scientific research
- ° Medicine or health sciences
- ° Veterinary and Animal Science
- ° Teacher
- ° Aeronautical Engineer
- ° Pharmacist
- ° Engineer

Course Pathways

VCE
Biology
Chemistry
Physics
Psychology

Introduction to VCE Psychology

It is said that “a man can alter his life by altering his thinking” (William James). Psychology takes students deep inside the mysteries of the human mind to discover how mental processes shape every one of us. Students examine exciting areas of study such as clinical psychology, behaviour psychology, sports psychology, examining various health and wellbeing issues and ideas about normality and abnormality through a study of criminal behaviour. Students also learn relevant research methodologies and conduct real life studies to explore the age-old question: What makes humans tick?

What will I Learn?

- Key Scientific skills
- Psychology: Mental processes and behaviours, Ethics in Psychology, Brain and the nervous system

What types of things will I do?

- Analyse the psychology experiments of the past and complete a research investigation into one
- Explore the varied career options available in the field of psychology
- Construct brain models and analyse case studies to investigate the functions of the different cortical lobes

Where can this lead me?

Career Outcomes

- Psychiatrist
- Counsellor
- Teacher
- Doctor
- Psychologist
- Social Worker
- Nurse

Course Pathways

VCE

Psychology

Introduction to VCE Biology

In Biology, students will learn more about cells and their structures and the various mechanisms that occur within and amongst cells to make living things function the way they are.

What will I Learn?

- Key Scientific skills
- Biology: Cell biology, Genetics and Pathogens
- Interactions with ecosystems

What types of things will I do?

- Understand and explain how cells are the basic building blocks of life
- Construct brain models and analyse case studies to investigate the functions of the different cortical lobes
- Create models and draw diagrams to show the structure of cells and the describe the role of various organelles within animal and plant cells
- Describe the structure and function of DNA and outline the nature of genetic code
- Evaluate challenges and strategies in the treatment of diseases

Where can this lead me?

Career Outcomes

- Teacher
- Doctor
- Research Assistant
- Nurse

Course Pathways

VCE

Biology
Chemistry
Physics

Introduction to VCE Business Management

Introduction to Business Management gives students an insight into how businesses are created, managed and operated successfully. Drawing on key concepts from VCE Business Management Units 1 and 2, students will explore areas such as business ideas and innovation, entrepreneurship, marketing, customer service, staffing, finance and workplace culture. Through real-world case studies and practical activities, students will develop an understanding of how businesses respond to challenges and make decisions to achieve their goals. This subject is ideal for students interested in leadership, teamwork, problem-solving and future pathways in business or management

What will I Learn?

- ° Business ideas and innovation
- ° Analysing real world case studies
- ° Understanding how a business operates and responds to challenges

What types of things will I do?

- ° Investigating successful businesses and entrepreneurs
- ° Create simple business plans and budgets
- ° Analyse real world business case studies
- ° Research how businesses use social media and technology.

Where can this lead me?

Career Outcomes

- ° Business Manager
- ° Human Resources
- ° Retail Management
- ° Event Management
- ° Customer Service

Course Pathways

- | | | |
|------------------------|-----|---------------------|
| ° Sports Management | VCE | Business Management |
| ° Sales | | |
| ° Business Owner | | |
| ° Business Development | | |
| ° Project Management | | |

YEAR 10

Introduction to VCE Geography

The study of Geography assists in students understanding of our world through exploring, analysing and understanding the characteristics of places. Geographers are interested in key questions concerning places and geographic phenomena: What is there? Where is it? Why is it there? What are the effects of it being there? How is it changing over time and how could, and should it change in the future? In this elective, students explore factors which influence the decisions of people about where to live. Students also explore different types of landscapes and their distinctive landscape features (and potential hazards)! Explore all these questions and more in the geography elective

What will I Learn?

- Consider challenges and solutions to sustainability in Wyndham and beyond.
- Participate in field work with real life applications.
- Learn the art of Cartography – create my own maps so that I am ready for this skill in the VCE!
- Learn about how Geography impacts on everyday life for young people in the 21st Century.

What types of things will I do?

- Evaluate and represent geographic data from several sources
- Work collaboratively on big issues facing future generations
- Participate in online discussion boards and virtual tours/experiences
- Think of outside the box solutions to issues like food security.

Where can this lead me?

Career Outcomes

- Historian
- Journalist
- Data Analyst
- Policy Analyst
- Environmental Scientist
- Information Management Officer

Course Pathways

- | | | |
|--------------------------------|-----|---------------------|
| ◦ Food Chemist | VCE | Business Management |
| ◦ Entrepreneur | | History |
| ◦ Business Owner | | Legal Studies |
| ◦ Politician | | Geography |
| ◦ Urban Development Consultant | | |

YEAR 10

Introduction to VCE History

In this elective, students get a taste of some of the topics covered in Units 1-4 History. They will begin Area of Study 1 by investigating the Pacific Theatre of World War II, with a focus on Australia, USA and Japan's role in the conflict. Key topics include the bombing of Pearl Harbor, The Fall of Singapore and the devastating atomic bombings of Hiroshima and Nagasaki. Area of Study 2 then turns to the American Civil Rights Movement where students will explore significant events such as the Montgomery Bus Boycott, the Freedom Rides, alongside the contributions of leaders like Martin Luther King Jr., Rosa Parks, and Malcolm X. Finally in Area of Study 3, students will investigate the American and Russian Revolutions, comparing how each arose from deep political and social tensions. Key case studies include the Boston Tea Party, the Declaration of Independence, the fall of the Romanov dynasty, and the rise of the Bolsheviks.

What types of things will I do?

- The Pacific Theatre of World War Two
- American Civil Rights Movement
- America and Russian Revolutions

What types of things will I do?

- Analyse different perspectives of people in the past and explore significance and contestability
- Interview a relative, friend or teacher about their experience of the past
- Create a podcast to communicate your historical understanding
- Learn how to find and question sources so as to draw your own conclusions

Where can this lead me?

Career Outcomes

- Lawyer
- Historian
- Researcher
- Journalist
- Teacher
- Foreign Correspondent
- Curator
- Policy Analyst

Course Pathways

- | | |
|-----|---------------------|
| VCE | Business Management |
| | Legal Studies |
| | History |
| | Geography |

Introduction to VCE Legal Studies

Aspiring to be a lawyer or to work within our justice system as a police officer or a social worker? Then Introduction to Legal Studies is for you! You will learn all about the Australian criminal and civil legal systems and cover topics such as: how do the courts work, what responsibilities are there when you sign a contract, what processes happen when someone commits a crime, when can people sue one another and what are your rights with the police. You will also explore different legal systems around the world and be prepared with key vocabulary and knowledge for VCE Legal Studies.

What types of things will I do?

- ° Learn about the criminal and civil system – how do courts operate and what kind of crimes does society face
- ° Get a handle of key vocabulary for Years 11 and 12
- ° Use evidence from real cases to answer legal questions
- ° Understand your rights and responsibilities under the Australian legal system to prepare you for when you are 18 and for now

What types of things will I do?

- ° Participate in an excursion to a law firm
- ° Act as a lawyer and write a defence to a real legal case study
- ° Participate in online discussion boards and virtual tours/experiences
- ° Consider which laws you agree with and how to influence changes to those you do not

Where can this lead me?

Career Outcomes

- ° Lawyer
- ° Government service
- ° Judge
- ° Barrister
- ° Paralegal
- ° Community worker
- ° Corrective Services
- ° Policy Analyst
- ° Business Owner

Course Pathways

VCE	Business Management Legal Studies
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YEAR 10

Introduction to VCE Visual Communication Design

In this unit students will have the opportunity to learn about the different fields of design practice. Students explore the Discover, Define and Develop phases of the VCD design process to address a selected design problem. Students will begin to develop the key knowledge and skills to enrol in Unit 1 Visual Communication Design (VCD) in Year 11. Students will develop a range of drawing and design thinking skills to deliver a design solution from a design brief. Students will also learn a range of manual and digital methods to develop and deliver ideas.

What will I Learn?

- ° Apply the VCD design process to discover, define, develop and deliver design solutions.
- ° Understand conceptions of good design.
- ° Develop and apply skills in drawing and making using a range of methods, materials and media techniques experimentation
- ° Learn technical drawing techniques
- ° Learn to manipulate the elements & principles of to communicate ideas and information

What types of things will I do?

- ° Create a folio of work
- ° Use the design elements & gestalt principles of visual perception to create effective VCD's
- ° Create original designs for a range of purposes
- ° Work through the design process

Where can this lead me?

Career Outcomes

- ° Videographer
- ° Photographer
- ° Journalism
- ° Education
- ° Advertising
- ° Marketing
- ° Artist
- ° Designer
- ° Architecture
- ° Printmaker
- ° Illustration
- ° Web Designer

Course Pathways

- ° Animation
- ° Fashion Design
- ° Interior Designer
- ° Game Designer
- ° Industrial Design
- ° Environmental Design
- VCE Visual Communication Design
Art: Making and Exhibiting
Media
- VET Refer to VET cluster

Introduction to Art Making and Exhibiting

Students will have the opportunity to explore the visual arts practices and styles of Australian and International artists as inspiration to develop a personal style, explore and express ideas, concepts, and themes in art works. Students will begin to develop the key knowledge and skills to enrol in Unit 1 Art: Making and Exhibiting in later years. The students will explore how artists manipulate materials, techniques, technologies, and processes to develop and express their intentions in art works and use these techniques to develop their own 2D and 3D artworks. Students analyse and evaluate artworks and exhibitions from different, times and places, to discuss how ideas and beliefs are interpreted by audiences.

What will I Learn?

- The art elements and principles.
- How to analyse and interpret artists artworks.
- Design artworks using artists as influence.
- The printmaking process.
- Tool safety in printmaking.
- How to use a DSLR Camera.
- Photography basics such as aperture and shutter speed.
- Angles and Shots.

What types of things will I do?

- Develop an art portfolio.
- Study artworks by analysing and interpreting.
- Use the art elements and principles to design artworks.
- Create lino prints.
- Evaluate student artworks.
- Use a DSLR camera to take photographs.
- Experiment with photography techniques.
- Present a photography portfolio.

Where can this lead me?

Career Outcomes

- Curator
- Photographer
- Journalism
- Education
- Advertising
- Marketing
- Artist
- Designer
- Architecture
- Printmaker
- Illustration
- Web Designer

Course Pathways

- | | |
|-----|---|
| VCE | Art Making and Exhibiting
Visual Communication Design
Media |
| VET | Refer to VET cluster |

Introduction to VCE Media

Students learn about different media forms. They will explore the media forms through the different stages of the production process including the Development, Pre-Production, Production, Post-Production and Distribution stages. Students will begin to develop the key knowledge and skills to enrol in Unit 1 Media in year 11. Students will develop a range of skills including viewing and analysing a film, the construction of a podcast from pitching an idea through to distribution and the creation of a game character.

What will I Learn?

- The media production process.
- What a media representation is in film.
- What a stereotype is in film.
- Ideologies in films.
- Elements of Photography.
- Codes and Conventions of film.
- How to use media equipment and software.
- Genre specific conventions.

What types of things will I do?

- Watch feature-length films.
- Analyse feature-length films.
- Learn the components of a DSLR camera.
- Analyse photographs.
- Understand how to use media equipment to take photos.
- Work in a group to design a film trailer.
- Work in a group to film and distribute a film trailer.
- Individually create a film poster.

Where can this lead me?

Career Outcomes

- Videographer
- Photographer
- Journalism
- Education
- Advertising
- Animator
- Storyboarding
- Director
- Producer
- Set Designer
- YouTuber
- Podcaster
- Marketing
- Camera Operator

Course Pathways

- | | |
|-----|----------------------|
| VCE | Media
English |
| VET | Refer to VET cluster |

Introduction to Environmental Science

Students will have the opportunity to explore the interrelationships between Earth's four systems that are land, water, living things and air. They will examine how past and current human activities affect the environment and how future challenges can be managed sustainably. Their learning will be facilitated by a range of interactive activities that include incursions, excursions, field work, collection of water and soil samples and their analysis in lab. Using ICT, students will be able to demonstrate in depth knowledge to describe the reasons behind the environmental issues that are affecting our society. Students will be challenged to propose sustainable solutions to address the environmental problems such as bushfires, drought, water scarcity and emission of greenhouse gases.

What will I Learn?

- ° Why do we study Environmental Science and how does it benefit to the society?
- ° How the knowledge of Environmental Science can be utilised to address the real-life challenges such as urban flooding, severe bushfires, changes in the climate, shortage of water and soaring temperatures?

What types of things will I do?

- ° Conduct the field work to collect the environmental data
- ° In field and lab analysis of environmental samples including soil, water and plants
- ° Investigating the effect of humans' activities on current environmental issues
- ° Based on the research investigation, propose the solution of environmental problems

Where can this lead me?

Career Outcomes

- ° Environmental Scientist
- ° Learning Facilitator of museums
- ° Environmental Education Officer
- ° Park Rangers
- ° Ecotourism

Course Pathways

VCE

Unit 1 & 2 – Interaction of Earth's systems to support and sustain life
Unit 3 & 4 – Climate Change

VET

Refer to VET cluster

NeuroDRIVE – Robotics Engineering

Students will have the opportunity to analyse, design, create and evaluate many aspects of Robots in our modern society. They will be empowered to use their creativity through science, engineering, technology and mathematics to ensure they are able to design, build and program a series of robots. Students will be able to make a robot that moves, pick up objects, hear, see and touch. They will be challenged to explore and solve real life problems that affect our society using the STEM design methodology.

What will I Learn?

- ° What a robot is and their benefits to society
- ° Introduction to Robotic Programming Languages
- ° How Science, Technology, Engineering and Maths can be combined to solve problems
- ° How to design and build a robot
- ° How to use your robot to analyse, design, create and evaluate robot based real life challenges

What types of things will I do?

- ° Design and make a robot that will address real life challenges
- ° Explore and solve real life issues relating to society using the STEM Design methodology

Where can this lead me?

Career Outcomes

- ° Game designer
- ° Computer programmer
- ° Engineer
- ° ICT Careers

Course Pathways

- | | |
|-----|--|
| VCE | Unit 1 &2 – Applied Computing
Unit 3 & 4 – Data Analytics |
| VET | Refer to VET cluster |

YEAR 10

STEM Foundations – Innovation and Inquiry

This course runs across the entire year for year 10 STEM Academy students. In STEM Foundations – Innovation and Inquiry, students undertake project-based learning (PBL) where students solve real-world issues within an integrated, multidisciplinary approach linking Science, Technology, Engineering and Mathematics. Students develop practical and creative skills using industry tools while exploring future-focused technologies and sustainable solutions.

What will I Learn?

- ° STEM design process (identify, ideate, prototype, test)
- ° CAD (e.g. Onshape) and CAM (e.g. Cura, laser cutting) tools
- ° Coding, data analysis and sensor systems
- ° Project planning and teamwork in STEM fields
- ° Sustainable and future-focused design thinking
- Innovation and creative problem-solving strategies

What types of things will I do?

- ° Design, 3D print and build functional prototypes
- ° Program robots to complete tasks
- ° Work in teams to solve design challenges
- ° Present projects to peers and industry guests
- Analyse data from real-world experiments
- Participate in excursions and mentorship programs with STEM professionals

Where can this lead me?

Career Outcomes

- ° Robotics engineer, game developer, data analyst
- ° Product designer, sustainability consultant
- ° Aerospace or biomedical engineer
- ° Engineering Studies

Course Pathways

- | | |
|-----|--|
| VCE | Applied Computing and Data Analytics
Biology, Chemistry, Physics, General
Mathematics, Mathematical Methods
Specialist Mathematics, Information
Technology |
| VET | Refer to VET cluster |

Police and Australian Defence Force Career Preparation

Both the Police Force and Defence Force/Army, Navy and Airforce provide extensive career and job opportunities. Both organisations are actively recruiting for applicants.

What will I Learn?

- Opportunities within each area/Defence/Police
- Requirements for employment, selection including GAP years
- How to prepare for Aptitude Tests, Interviews and Selection
- Roles, training apprenticeship which are available
- Identify my personal strengths and skills for pathways planning into either police or defence force.

What will I do?

- Project/research into either police or Australian Defence Force
- Visit Police/Defence Recruiting
- Experience visits from serving members of Police Officers/Defence Force
- Map my pathways into either organisation
- Practice entry and aptitude tests, literacy/numeracy skills suitable for selection
- Application writing and necessary skills, knowledge and community participation

Where can this lead me?

Career Outcomes

- Police Force
- Australian Defence Force – Army, Navy and Airforce

Course Pathways

VCE Legal Studies

VET Refer to VET cluster

Senior Secondary Program Pathways (Year 11 – 12)

Before making decisions about senior subject selections, Year 9 and 10 students will participate in and investigate various career paths. Student across 7-12 have the opportunity to meet with Careers and Pathways Counsellors and Mentors to seek advice. They participate in the Grange P-12 College World of World Expo and undertake specific course counselling. At Year 9, students participate in the Inspire program, which includes completing Morrisby profiling. The Morrisby profile is used to assist students with their year 10 and Year 11 subject and pathway selections.

Senior School Program and Pathways

The Grange P-12 College is focused on providing students with advice and direction regarding their career pathways. The College commitment to engaging young people in these critical decisions are reflected in commitment to provide students with access to onsite Careers Counsellors, a VET Coordinator, a VCE Vocational Major Assistant Principal and Senior Years Leadership Team. The College has a well-resourced Careers and Pathways Hub, that is highly accessible to students throughout the schooling day. Students completing their VCE have access to a study space in the College library that contains careers and pathways resources which has information about tertiary institutions, key dates, events, and employment opportunities.

Students are provided with extensive careers counselling from within the College, including specialty career expos, visits to universities and TAFE and incursions.

The Grange P-12 College supports students wishing to explore the world of work through our Year 10 work experience program. The College has forged links with local businesses committed to providing students with the necessary skills to succeed in the workforce. (Please see the Careers Leaders in the Careers and Pathways Hub for further information).

Selecting a pathway and choosing subjects

VCE SCORED

Students undertaking VCE scored are working toward gaining an ATAR for University entry. VCE is a two-year course and students should plan based on their future pathway

In Year 11 (Unit 1 and Unit 2) students study English and select five other subjects. Some subjects may require an entrance assessment. In Year 12 (Unit 3 and Unit 3) students study English and four other subjects which contribute to their ATAR.

Students completing VCE scored also need to be aware that:

- Specific entry requirement into tertiary education are needed including pre-requisite subjects (specific subjects that need to be taken in VCE) and ATAR scores. Specific information is available on the VTAC website, www.vtac.edu.au/.

VCE Vocational Major (VCE VM)

Year 11 and 12 students undertaking the VCE VM will complete Literacy, Numeracy, Personal Development Skills (PDS), Work Related Skills (WRS) and a VET.

Students should keep in mind the following in selecting a VCE pathway (VCE scored and VCE VM) and appropriate subjects, including VET subjects:

- Careers and tertiary courses that interest them
- Subjects they are good at, enjoy and likely to do well in
- Subjects that interest them.

VICTORIAN CERTIFICATE OF EDUCATION SUBJECT OVERVIEW

English	Mathematics	Science	Humanities
VCE English (Core for all students) Units 1 - 4	VCE Foundation Mathematics Units 1 - 4	VCE Biology Units 1 - 4	VCE Business Management Units 1 - 4
VCE EAL English (Core for all EAL students) Units 1 - 4	VCE General Mathematics Units 1 – 4	VCE Chemistry Units 1 – 4	VCE Legal Studies Units 1 - 4
VCE - VM Literacy Units 1 – 4	VCE Maths Methods CAS Units 1 – 4	VCE Physics Units 1 - 4	VCE Modern History and History – Revolutions Units 1 - 4
	VCE Specialist Mathematics Units 1 - 4	VCE Psychology Units 1 - 4	VCE Geography Units 1 – 4
	VCE - VM Numeracy Units 1 – 4	Information Technology	
		VCE Applied Computing & Data Analysis Units 1 – 4	

****Students interested in enrolling in a VET course should refer to the [2026-wyndham-vetdss-cluster-handbook-08.04.2026.pdf](#) and visit the [VCAA 'Get VET' webpage](#) for additional information and guidance.****

Health and Physical Education	The Arts	Specific VCE VM and VPC Programs
VCE Health and Human Development Units 1 - 4	VCE Art Making and Exhibiting Units 1 – 4	VCE VM Personal Development Skills Units 1 – 4
VCE Physical Education Units 1 - 4	VCE Visual Communication Design Units 1 – 4	VCE VM Work Related Skills Units 1 – 4
VCE Food Studies Units 1 - 4	VCE Media Units 1 – 4	VCE VM Literacy Units 1-4
		VCE VM Numeracy Units 1-4
		VET

VICTORIAN CERTIFICATE OF EDUCATION

VCE - Scored

Studies and Units

- All studies have four units. Each unit lasts one semester.
- Units 1 & 2 are usually taken in Year 11.
- Units 3 & 4 are usually taken in Year 12.
- Students may take Units 1 & 2 as single units – that is, just the Unit 1 or just the Unit 2 – Students must take Units 3 & 4 as a sequence (that is Unit 4 follows Unit 3).
- The VCE program is the complete list of VCE units studied over two years (Year 11 & 12). It is recommended that students consider as broad a VCE as possible to provide flexible pathways.
- Usually, this list will consist of 20 to 24 units (or five to six studies, each of four units).
- The minimum to satisfy successful completion of VCE is 16 units across Year 11 & 12.
- Regardless of how many units' students do altogether, you must receive satisfactory completion of at least three units of English and the sequence of English Units 3 & 4, plus a sequence of Units 3 & 4 in three studies apart from English.

Assessment and Reporting

- Judgements about satisfactory completion are based on learning outcomes.
- Each VCE unit of study has between two and four outcomes.
- For all studies, the school decides whether you have satisfactorily completed a unit by achieving the learning outcomes.

Level of Performance

- For Units 1 & 2, there are specific tasks called School Assessed Course (SAC's) that are set by subject teachers, which will measure your level of performance.
- For Units 3 & 4, there are additional types of assessment. These graded assessments are either school assessed or external examinations. Each VCE study has two or three graded assessments over Units 3 & 4, a combination of school assessments and examinations.

School Assessment

There are two kinds of school assessment. The first is called School Assessed Coursework (SACs). This assesses how you have performed in the Learning Outcomes specified in the Study Design. The second is called a School Assessed Task (SAT). This task will follow the specifications set by the Victorian Curriculum Assessment Authority. (Generally, in subjects requiring a practical component e.g. The Arts & Technology studies.)

VCE English

This study aims to develop competence in the understanding and use of English for a variety of purposes sufficient to meet the demands of post-school employment, further education and participation in a democratic society. It emphasises the integration of reading, writing, speaking, listening and thinking skills. It values student diversity and particularly encourages learning in which students take responsibility for their language development and thus grow in confidence and in language skill and understanding.

Structure

This study is made up of four units:

- | | |
|--------|---|
| Unit 1 | Area of Study 1 – Reading and Exploring Texts
Area of Study 2 – Crafting Texts |
| Unit 2 | Area of Study 1 – Reading and Exploring Texts
Area of Study 2 – Exploring Argument |
| Unit 3 | Area of Study 1 – Reading and Responding to Texts
Area of Study 2 – Creating Texts |
| Unit 4 | Area of Study 1 – Reading and Responding to Texts
Area of Study 2 – Analysing Argument |

Unit Outlines

- | | |
|--------|--|
| Unit 1 | The focus of this unit is on reading and exploring a variety of texts. Students also produce their own texts, paying careful attention to context, audience, and purpose. |
| Unit 2 | The focus of this unit is on analysing the construction of texts and exploring the ways in which argument and language are used to position an audience. Students also deliver an oral presentation on a topic of their choice. |
| Unit 3 | In this unit, students read and respond to texts by analysing the author's ideas, concerns and values and methods used to construct meaning in a sustained piece of writing. Students also produce texts for contexts and audiences informed by mentor texts. |
| Unit 4 | In this unit, students critically analyse an author's ideas, concerns, values, and construction of a text in a sustained piece of writing. Students also analyse the use of argument and language in persuasive texts and develop and present a point of view. |

Levels of Achievement:

Unit 3 School Assessed Coursework
Unit 4 School Assessed Coursework
End of Year Examination

Career pathways include:

- | | |
|---------------------|------------------------------------|
| ° Journalism, media | ° Professional writing and editing |
| ° Publishing | ° Advertising and marketing |
| ° Creative writing | ° Government and public service |

VCE EAL

(English as an Additional Language)

English as an Additional Language (EAL) focuses on how English language is used to create meaning in written, spoken and multimodal texts of varying complexity. Students will read and respond to texts to develop their analytical and creative skills. They will learn to analyse and create their own persuasive texts. This course equips students with English language skills to help them to participate in the wider community and become global citizens.

In Units 3 and 4, EAL students need to meet certain criteria for enrolment in VCE EAL. Enrolment in this course is available to qualifying students only.

Structure

This study is made up of 4 units:

- | | |
|--------|---|
| Unit 1 | Area of Study 1 – Reading and Exploring Texts
Area of Study 2 – Crafting Texts |
| Unit 2 | Area of Study 1 – Reading and Exploring Texts
Area of Study 2 – Exploring Argument |
| Unit 3 | Area of Study 1 – Reading and Responding to Texts
Area of Study 2 – Creating Texts |
| Unit 4 | Area of Study 1 – Reading and Responding to Texts
Area of Study 2 – Analysing Argument |

Unit Outlines

- | | |
|--------|--|
| Unit 1 | The focus of this unit is on reading and exploring a variety of texts. Students also produce their own texts, paying careful attention to context, audience, and purpose. |
| Unit 2 | The focus of this unit is on analysing the construction of texts and exploring the ways in which argument and language are used to position an audience. Students also deliver an oral presentation on a topic of their choice. |
| Unit 3 | Students respond analytically to the ideas, views and concerns in a text, comprehend an audio- or audio-visual text, produce their own texts considering audience, purpose and context and comment on decisions made in the writing process. |
| Unit 4 | In this unit, students critically analyse an author's ideas, concerns, values, and construction of a text in a sustained piece of writing. Students also analyse the use of argument and language in persuasive texts and develop and present a point of view. |

Levels of Achievement:

Unit 3 School Assessed Coursework Unit
4 School Assessed Coursework End of
Year Examination

Career pathways include:

- | | |
|---------------------|------------------------------------|
| ° Journalism, media | ° Professional writing and editing |
| ° Publishing | ° Advertising and marketing |
| ° Creative writing | ° Government and public service |

VCE Mathematics

Overview

Mathematics is the study of function and pattern in number, logic, space and structure. It provides both a framework for thinking and a means of symbolic communication that is powerful, logical, concise and precise. It also provides a means by which people can understand and manage their environment. Essential mathematical activities include calculating and computing, abstracting, conjecturing, proving, applying, investigating, modelling and problem solving.

This study is designed to provide access to worthwhile and challenging mathematical learning in a way which considers the needs and aspirations of a wide range of students. It is also designed to promote student's awareness of the importance of mathematics in everyday life in a technological society, and confidence in making effective use of mathematical ideas, techniques and processes.

General Guide for Unit Selection

There are several different combinations of units or (pathways). These are described below. Discuss what would best suit you with your Maths Teacher, Careers Leader, Parents and others before making your selection.

Please note that in the calculation of students' ATARs no more than two subjects of Year 12 Mathematics can contribute to the ATAR primary four.

* Specialist Maths MUST be taken with Mathematical Methods.

Package	Career Pathways include	No. of units	Year
Foundation Math's 1&2	TAFE and apprenticeships	4	11
Foundation Maths 3&4			12
General Maths 1&2	Apprenticeships, Nursing, Art, Music	2	11
General Maths 1&2	Courses for Commerce, Biology, Sciences, Nursing, Teaching and some other Tertiary courses	4	11
General Maths 3&4			12
General Maths 1&2	Courses for Commerce, Biological Sciences, Nursing, Medicine, Engineering, Health Sciences and Computing Mathematics	8	11
General Maths 3&4			12
Maths Methods CAS 1&2			11
Maths Methods CAS 3&4			12
Maths Methods CAS 1&2	Provide widest choice and strongest background. Medicine, Engineering, Health Sciences and Computing Mathematics	4	11
Maths Methods CAS 3&4			12
Maths Methods CAS 1&2	Courses for Civil Systems, Computing, Construction, Mechanical Systems, Property or Spatial Systems	8	11
Maths Methods CAS 3&4			12
Specialist Maths 1&2			11
Specialist Maths 3&4			12

VCE Foundation Mathematics

Foundation Mathematics Units 1 & 2 are designed to be widely accessible and provide the continuing of mathematical development of students entering VCE needing mathematical skills to support their other VCE subjects, including VET studies and for those students who wish to undertake Foundation Mathematics at Units 3 & 4 in Year 12. They focus on providing students with the mathematical knowledge, skills, understanding and dispositions to solve problems in real contexts for a range of workplace, personal, further learning, and community settings relevant to contemporary society. Students undertake mathematical investigations over a two-week period allowing students to apply the key knowledge and skills developed throughout the units using real life scenarios. Students will formulate, explore, and communicate their ideas.

Structure

The study is made up of 4 Units each containing the following Areas of Study:

Area of Study 1	Algebra, number, and structure
Area of Study 2	Data analysis, probability, and statistics
Area of Study 3	Financial and consumer mathematics
Area of Study 4	Space and measurement

Unit Outlines

Unit 1	This unit focuses on providing students with the mathematical knowledge, skills, understanding and dispositions to solve problems in real contexts for a range of workplace, personal, further learning, and community settings relevant to contemporary society.
Unit 2	The focus of Unit 2 is on extending breadth and depth in the application of mathematics to solving practical problems from contexts present in students' other studies, work and personal or other familiar situations
Unit 3 & 4	These units focus on extending the skills learnt in Units 1 and 2. The units build on students' mathematical knowledge and skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning, community, and global settings relevant to contemporary society.

Levels of Achievement

Career pathways include:

° Unit 3 school assessed Coursework	° Hairdresser	° Apprenticeships
° Unit 4 school assessed Coursework	° Makeup artists	° General manufacturing
° End of Year Examination	° Hospitality	° Electrical technician
	° Plumber	° Building and Construction

VCE 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. Students apply techniques, routines and processes involving rational and real arithmetic, sets, lists, tables and matrices, diagrams and geometric constructions, algorithms, algebraic manipulation, recurrence relations, equations, and graphs, with and without the use of technology. Students undertake mathematical investigations over a two-week period allowing them to apply the key knowledge and skills developed throughout the units using real life scenarios. Students formulate, explore, and communicate their ideas.

Structure

The study is made up of 4 Units each containing the following Areas of Study are:

Area of Study 1	Data analysis, probability and statistics and algebra, number, and structure
Area of Study 2	Functions, relations, and graphs and discrete mathematics
Area of Study 3	Data analysis probability and statistics and recursion and financial modelling
Area of Study 4	Matrices, networks and decision mathematics

Unit Outlines

Unit 1 & 2	In these units students study a range of mathematical concepts including: the association between two numerical variables, scatterplots, and lines of good fit by eye and their interpretation; use of graphs and networks to model and solve a range of practical problems, including connectedness, shortest path, and minimum spanning trees; direct and inverse variation, transformations to linearity and modelling of some non-linear data; measurement, accuracy, computations with formulas for different measures, similarity and scale in two and three dimensions.
Unit 3 & 4	These units focus on real-life application of mathematics and consist of the areas of study as listed above. Students 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 use technological and by-hand approaches for estimation and computation.

Levels of Achievement

Career pathways include:

° Unit 3 school assessed Coursework	° Accounting	° Computer analysis/programming
° Unit 4 school assessed Coursework	° Architect	° Engineering
° Two End of Year Examinations:	° Nursing	° Health Professional
Multiple Choice and Written responses	° Teacher	° Designer

MATHEMATICS

VCE Mathematical Methods

CAS

Mathematical Methods CAS is a demanding course which significantly extends students' knowledge in key areas of Algebra, Functions, Graphs and introduces them to the fundamental ideas of Transformational Geometry (including Matrix Methods) and Calculus. Extensive use will be made of the TI-nspire CAS calculator. Any student undertaking Mathematical Methods CAS should have a strong mathematical background, particularly in Algebra, and should have achieved at least above average results for Semester 1 and 2 examinations in Year 10 and completed Introduction to Mathematical Methods at Year 10.

Structure

The study is made up of 4 Units each containing the following Areas of Study are:

Area of Study 1	Functions, relations and graphs
Area of Study 2	Algebra, number and structure
Area of Study 3	Calculus
Area of Study 4	Data analysis, probability and statistics

Unit Outlines

Unit 1 & 2	Units 1 and 2 focuses on the study of simple algebraic functions, in the Areas of Study listed above. The focus of Unit 2 is the study of simple transcendental functions, the calculus of polynomial functions and related modelling applications.
Unit 3 & 4	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.

Levels of Achievement

Career pathways include:

° Unit 3 school assessed Coursework	° Medicine	° Architect
° Unit 4 school assessed Coursework	° Pilot	° Engineering
° Two End of Year Examinations: Multiple Choice and Written responses	° Surveyor	° Statistician
	° Veterinarian	° Scientist

VCE Specialist Maths

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

Students undertake mathematical investigations over a two-week period allowing students to apply the key knowledge and skills developed throughout the units using real life scenarios. Students will formulate, explore, and communicate their ideas.

***Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Units 3 and 4.**

Structure

The study is made up of 4 Units each containing the following Areas of Study are:

Function, relations and graphs
Discrete Maths
Data analysis, probability and statistics

Algebra, number, and structure
Space and Measurement

Unit Outlines

Unit 1 & 2

In these units' students study a range of mathematical concepts including: develop a formal notation of number systems including the complex numbers, introduction to principles of proof, direct proof and proof by contraction; logic and algorithms, binary systems, Karnaugh maps, and pseudocode; sequences and series, matrix notation, dimension and use of matrices to represent data; vectors algebra, representation of vectors on the plane, application of vectors to real-life problems; Calculus; kinematics, use of velocity-time graphs to analyse rectilinear motion; differential equations; and Data analysis, probability and statistics.

Unit 3 & 4

These units focus on real-life application of mathematics and consist of the areas of study as listed above. Students 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 use technological and by-hand approaches to estimation and computation.

Levels of Achievement

Career pathways include:

- ° Unit 3 school assessed Coursework
- ° Unit 4 school assessed Coursework
- ° Two End of Year Examinations:
Multiple Choice and Written responses

- ° Medicine
- ° Pilot
- ° Surveyor
- ° Veterinarian

- ° Architect
- ° Engineering
- ° Statistician
- ° Scientist

VCE Biology

Biology is a diverse and evolving science discipline that seeks to understand and explore the nature of life, past and present. Despite the diversity of organisms and their many adaptations for survival in various environments, all life forms share a degree of relatedness and a common origin. The study explores the dynamic relationships between organisms and their interactions with the non-living environment. It also explores the processes of life, from the molecular world of the cell to that of the whole organism, that maintain life and ensure its continuity. All units involve designing and performing experiments.

Structure

The study is made up of 4 Units:

Unit 1	How do organisms regulate their functions?
Unit 2	How does inheritance impact on diversity?
Unit 3	How do cells maintain life?
Unit 4	How does life change and respond to challenges?

Unit Outlines

Unit 1	In this unit students examine the cell as the structural and functional unit of life. They focus on cell growth, replacement and death and the role of stem cells in differentiation, specialisation and renewal of cells. Through this cell specialisation, students explore homeostasis in plants and animals by learning about various systems.
Unit 2	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 use chromosomes to explain meiosis, explore the effect of genes, environment and epigenetic factors on phenotypic expression. Students study sexual and asexual reproduction, adaptations, special survival mechanisms.
Unit 3	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.
Unit 4	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 diseases.

Levels of Achievement

- ° Unit 3 school assessed Coursework
- ° Unit 4 school assessed Coursework
- ° End of Year Examination

Career pathways include:

- ° Psychologist
- ° Counselling
- ° Criminology
- ° Biochemist
- ° Doctor
- ° Social Worker
- ° Lawyer
- ° Pharmaceuticals

VCE Chemistry

Chemistry involves investigating and analysing the composition and behaviour of matter, and the chemical processes involved in producing useful materials for society in ways that minimise adverse effects on human health and the environment. Chemistry underpins the generation of energy for use in homes and industry, the maintenance of clean air and water, the production of food, medicines and new materials, and the treatment of wastes.

Structure

The study is made up of four Units:

Unit 1	How can the diversity of materials be explained?
Unit 2	How do chemical reactions shape the natural world?
Unit 3	How can design and innovation help to optimise chemical processes?
Unit 4	How are carbon-based compounds designed for purpose?

Unit Outlines

Unit 1	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.
Unit 2	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, acid-base and redox reactions, solubility, molar volume of a gas, volumetric analysis, and the use of a calibration curve.
Unit 3	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.
Unit 4	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.

Levels of Achievement

Career pathways/sectors/fields include:

° Unit 3 school assessed Coursework	° Biochemistry	° Mining/Metallurgy
° Unit 4 school assessed Coursework	° Engineering	° Forensics
° End of Year Examination	° Environmental Sciences	° Petroleum Industry
	° Pharmaceuticals	° Medicine/allied health
	° Food industry	° Administration/Regulation

SCIENCE

VCE Physics

UNITS 1- 4

Physics seeks to understand and explain the physical world. It examines models and ideas used to make sense of the world and which are sometimes challenged as new knowledge develops. By looking at the way matter and energy interact through observations, measurements and experiments, physicists gain a better understanding of the underlying laws of nature.

Structure

The study is made up of 4 Units:

Unit 1	How is energy useful to society?
Unit 2	How does physics help us understand the world?
Unit 3	How do fields explain motion and electricity?
Unit 4	How have creative ideas and investigation revolutionised thinking in physics?

Unit Outlines

Unit 1	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. These ideas are applied to contemporary societal issues like climate change, electrical home safety and Australian energy needs.
Unit 2	In this unit students explore the power of experiments in developing models and theories. They investigate a variety of phenomena by making their own observations and generating questions, which in turn lead to experiments in the context of energy and motion of objects and the effect of balanced and unbalanced forces on motion.
Unit 3	In this unit students 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. They explore, compare and contrast the gravitational, magnetic and electric fields.
Unit 4	In this unit, students learn how understanding of light, matter and motion have changed over time and consider the limitations of classical mechanics as they explore Einstein's view of the universe. They undertake investigations to generate primary data relating to fields, motion or light.

Levels of Achievement

Career pathways include:

° Unit 3 school assessed Coursework	° Physicist/ Scientist	° Astronomer
° Unit 4 school assessed Coursework	° Engineer	° Accelerator operator
° End of Year Examination	° Nuclear Scientist	° Geophysicist

VCE Psychology

Psychology is a broad discipline which incorporates the scientific study of the mind and of human behaviour. Students will examine human behaviour through biological and social perspectives and apply this knowledge to practical activities (experiments), theories and circumstances of everyday life. Students explore how people think, feel and behave and gain valuable insights into human behaviour and a range of psychological health issues which face Australian society.

Structure

The study is made up of 4 Units:

Unit 1	How are behaviour and mental processes shaped?
Unit 2	How do external factors influence behaviour and mental processes?
Unit 3	How does experience affect behaviour and mental processes?
Unit 4	How is wellbeing developed and maintained?

Unit Outlines

Unit 1	Students investigate how the brain functions and examine the relationship between the mind, brain and human behaviour. Students also examine psychological development and consider the complex interplay between nature and nurture which leads us to become the person that we are. Students examine 'atypical' psychological development through a study of psychotic disorders and explore ideas about 'normality.' Students complete a self-directed research investigation.
Unit 2	Students examine how a person's thoughts, feelings and behaviours are influenced by a variety of factors: psychological and social. Students explore how perception of stimuli can be distorted and explore a range of factors which influence behaviour in social groups. Students undertake a practical investigation and draw conclusions from data.
Unit 3	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 functioning and the emerging research into the gut brain axis. Students will also investigate the concepts of learning and memory, applying these theories to practical activities.
Unit 4	Students investigate sleep as an example of an altered state of consciousness and explore the effects of sleep deprivation on a person's functioning. They will also explore mental wellbeing and consider factors which contribute to this. Students will conduct an in-depth study of Specific Phobia.

Levels of Achievement

- ° Unit 3 school assessed Coursework
- ° Unit 4 school assessed Coursework
- ° End of Year Examination

Career pathways include:

- ° Psychologist
- ° Counselling
- ° Criminology
- ° Doctor
- ° Social Worker
- ° Lawyer

HUMANITIES

VCE History

UNITS 1- 4

The great writer, George Orwell, once remarked: “He who controls the past controls the future.” Historical studies involve fascinating explorations of human action in the past and make a critical contribution to our understanding of the present. In this unit, students immerse themselves in the study of past societies to understand themselves, others and to broaden their social, political, economic and cultural understanding of the world. In Units 1-4 students explore the problematic nature of working with historical sources and learn that in the past (just as in the present) things are never as simple as they might at first seem. Students explore different interpretations and heated academic debates while undertaking a whirl wind tour which takes them from the failure of the League of Nations to the events and conditions that contributed to the outbreak of American and Russian revolutions.

Structure

The study is made up of 4 units:

Unit 1	Modern History: Change and Conflict
Unit 2	Modern History: The Changing World Order
Unit 3	Revolutions: The American Revolution (1754–4 July 1776)
Unit 4	Revolutions: The Russian Revolution (1896– 26 October 1917)

Unit Outlines

Unit 1	Students explore the way in which the world was transformed by political, ideological, social and cultural ideologies in the late 19 th Century, during the First World War and subsequently in the interwar period. Students examine new ideologies which emerged such as Federation and immigration restriction in Australia, socialism in the USSR during the reigns of Lenin and Stalin, imperialism and the setting up of colonies world-wide, fascism in Germany and Italy and isolationism in the USA. Students examine continuity and change in patterns of life during the first half of the century in Australia and the USSR. Students examine the first efforts to achieve world peace with the formation (and tragic failure) of the League of Nations and explore the complex causes of the Second World War.
Unit 2	Students explore the nature and impact of the Cold War: a decades long confrontation between the ideologies of communism/socialism and capitalism/democracy. Entering a world of intrigue, spies and global conflict students will understand this period from a variety of viewpoints. Independence movements in former colonies in Africa, the Middle East and Asia-Pacific provide a backdrop to the study of continuity and change in the modern world. Students also examine social movements for change such as the LGBT+ movement for civil rights and the Occupy movement of 2011.
Unit 3/4	In Units 3 and 4 Revolutions, students investigate the significant historical causes and consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point in the collapse and destruction of an existing political order which results in extensive change to society. Their consequences have a profound effect on the political and social structures of the post-revolutionary society. In these unit's students construct an argument about the past using historical sources (primary sources and historical interpretations) as evidence to analyse the complexity and multiplicity of the causes and consequences of revolution and to evaluate the extent to which the revolution brought change to the lives of people. Students use historical interpretations to evaluate the causes and consequences of revolution and the extent of change instigated by the new regime

Levels of Achievement

- ° Unit 3 School Assessed Coursework
- ° Unit 4 School Assessed Coursework
- ° End of Year Examination

Career Pathways

- ° Journalist
- ° Historian
- ° Educator
- ° Policy Analyst
- ° Criminologist and social studies scientist
- ° Roles in non-government agencies
- ° Social media consultant

VCE Business Management

Thinking of a career in the corporate sector about starting your own business? Want to undertake further study in management, marketing, commerce or finance at university or TAFE? Be prepared with VCE Business Management! Business Management examines the ways in which people at various levels within a business organisation manage resources to achieve key objectives. These units examine the theory and practice of managing different business types and sizes, through exposure to real business scenarios.

Structure

The study is made up of 4 Units:

Unit 1	Planning a Business
Unit 2	Establishing a business
Unit 3	Managing a Business
Unit 4	Transforming a Business

Unit Outlines

Unit 1	In this unit students explore the factors affecting business ideas and the internal and external environments within which businesses operate, and the effect of these on planning a business.
Unit 2	This unit focuses on the establishment phase of businesses life. In this unit students examine the legal requirements that must be satisfied to establish a business. They investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping.
Unit 3	In this unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relationship between each of these. Students investigate strategies to manage both staff and business operations to meet objectives.
Unit 4	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 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.

Levels of Achievement

- ° Unit 3 School Assessed Coursework
- ° Unit 4 School Assessed Coursework
- ° End of Year Examination

Career Pathways

- ° Owner/small business manager
- ° Innovation and entrepreneur
- ° Advertising executive, publicity and marketing
- ° Tourism/hospitality management
- ° Business Management, advisor/consultant
- ° Social media consultant

VCE Legal Studies

VCE Legal Studies examines the institutions and principles that are essential to the Australian legal system. Students develop an understanding of the rule of law, law-makers, legal institutions, the relationship between the people and the Australian Constitution, the protection of rights in Australia, and the Victorian justice system. Through applying knowledge of legal concepts and principles to a range of actual and / or hypothetical scenarios, students develop an ability to use legal reasoning to argue a case for or against a party in a civil or criminal matter. They develop an appreciation of the ability of people to actively seek to influence changes in the law and analyse both the extent to which our legal institutions are effective, and whether the Victorian justice system achieves the principles of justice.

Structure

The study is made up of 4 Units:

Unit 1	The presumption of innocence
Unit 2	Wrongs and rights
Unit 3	Rights and justice
Unit 4	The people, the law and reform

Unit Outlines

Unit 1	In this unit students develop an understanding of legal foundations, such as the different types and sources of law, the characteristics of an effective law, and an overview of parliament and the courts. Students are introduced to and apply the principles of justice. They investigate key concepts of criminal law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime.
Unit 2	In this unit, students investigate key concepts of civil law and apply these to actual and/or hypothetical scenarios to determine whether a party is liable in a civil dispute. Students explore different areas of civil law, and the methods and institutions that may be used to resolve a civil dispute and provide remedies.
Unit 3	In this unit, students examine the methods and institutions in the criminal and civil justice system and consider their appropriateness in determining criminal cases and resolving civil disputes. Students consider the Magistrate' Court, County Court and Supreme Court within the Victorian court hierarchy, as well as other means and institutions used to determine and resolve cases.
Unit 4	In this unit, students explore how the Australian Constitution establishes the law- making powers of the Commonwealth and state parliaments, and how it protects the Australian people through structures that act as a check on parliament in law-making. Students develop an understanding of the significance of the High Court in protecting and interpreting the Australian Constitution

Levels of Achievement

- ° Unit 3 School Assessed Coursework
- ° Unit 4 School Assessed Coursework
- ° End of Year Examination

Career Pathways

- ° Paralegal
- ° Law enforcement
- ° Criminology
- ° Lawyer (solicitor/barrister)
- ° Correctional services
- ° Social media consultant

HUMANITIES

VCE Geography

UNITS 1 - 4

From the devastation of natural disasters to patterns of how human communities travel the world, VCE Geography will help foster a sense of wonder and curiosity about the people, cultures, and environments throughout the world. Focusing on the key concepts of change and interconnection, students explore big Geographic questions through fieldwork, case studies and a range of geospatial technologies. Join us on an amazing adventure to learn more about our planet!

Structure

The study is made up of 4 Units.

Unit 1	Hazards and disasters
Unit 2	Tourism: issues and challenges
Unit 3	Changing the land
Unit 4	Human population: trends and issues

Unit Outlines

Unit 1	In this unit students investigate how people have responded to hazards and disasters at range of different scales. Students also analyse and evaluate the nature, purpose and effectiveness of a range of responses to selected hazards and disasters.
Unit 2	This unit focuses on the characteristics of tourism: where it has developed, its various forms, how it has changed and continues to change and its impact on people, places and environments. Students also explore the issues and challenges of ethical tourism and various techniques which aim to manage tourism.
Unit 3	In this unit students investigate two major processes that are changing land cover in many regions of the world: melting glaciers and ice sheets, and deforestation. They investigate the distribution and causes of the two processes. They select one location for each of the processes to develop a greater understanding of the changes to land cover produced by these processes, the impacts of these changes and responses to these changes at different scales.
Unit 4	In this unit students investigate the geography of human populations. They explore the patterns of population change, movement and distribution, and how governments, organisations and individuals have responded to those changes in different parts of the world. Students will also examine the dynamics of populations and their environmental, economic, social, and cultural impacts on people and places.

Levels of Achievement

- Unit 3 School Assessed Coursework
- Unit 4 School Assessed Coursework
- End of Year Examination

Career Pathways

- Geospatial industry
- Data analyst
- Sustainability management
- Town planning and urban consulting
- Community development
- Digital technologies
- Tourism industry (agents, bloggers, guides)

VCE Applied Computing & Data Analytics

This study is designed to foster student confidence in becoming capable, responsible and ethical users of ICT and adapters of technology. The critical evaluation of the role of ICT in society and the use of selected hardware and software to solve information problems, aims to empower students to initiate or respond effectively to technological change in society and their future workplace.

Structure

The study is made up of 4 Units:

Unit 1	Applied Computing
Unit 2	Applied Computing
Unit 3	Data Analytics
Unit 4	Data Analytics

Unit Outlines

Unit 1	Students are introduced to the stages of the problem-solving methodology. Students focus on how data can be used within software tools such as databases and spreadsheets to create data visualisations, and the use of programming languages to develop working software solutions.
Unit 2	Students focus on developing innovative solutions to needs or opportunities that they have identified and propose strategies for reducing security risks to data and information in a networked environment. They create an innovative solution in an area of interest. They learn about cybersecurity, investigate networks and threats and risks to data and information.
Unit 3	Students apply the problem-solving methodology to identify and extract data using software tools such as databases, spreadsheet and data visualisation software to create data visualisations or infographics. They develop an understanding of the analysis, design and development stages of the problem-solving methodology.
Unit 4	Students focus on determining the findings of a research question by developing infographics or dynamic data visualisations based on large complex data sets and on the security strategies used by an organisation to protect data and information from threats.

Levels of Achievement

Career pathways include:

° Unit 3 school assessed Coursework	° Data science	° Software Developer	° Cloud computing
° Unit 4 school assessed Coursework	° Cyber security	° UX Designer	° Artificial Intelligence
° End of Year Examination	° Robotics Engineer	° Computer Programmer	
	° Network Manager	° IT Manager	° Game design/development

VCE Health and Human Development

The central focus of Health and Human Development study is to examine the factors that promote health and wellbeing in individuals, families and communities.

Structure

The study is made up of 4 Units:

Unit 1	Understanding Health and Wellbeing
Unit 2	Managing Health and Development
Unit 3	Australia's Health in a globalised world
Unit 4	Health and Human Development in a global context

Unit Outlines

Unit 1	Students explore health and wellbeing as a concept and come to understand that it occurs in many contexts and interpretations. With a focus on health and wellbeing they investigate the World Health Organisations definition and explore other health interpretations. Students look at what influences health outcomes and what indicators are used to measure and evaluate health status. With an emphasis on youth, students consider their own health as individuals and as a cohort and build their health literacy by interpreting and using data in research investigations.
Unit 2	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. They study the Australian healthcare system from the perspective of youth and analyse health information. Students investigate the challenges and opportunities of digital media and consider the issues of health data and access to quality health care.
Unit 3	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. Students consider the benefits of optimal health and wellbeing and analyse and evaluate 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 both locally and globally.
Unit 4	Students examine health and human development in a global context. Students explore factors that contribute to health inequalities between and within countries. Students look over changes in health status over time and study the key concept of sustainability. They 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). Students also investigate aid programs and evaluate the effectiveness of health initiatives globally.

Levels of Achievement

- ° Unit 3 school assessed Coursework
- ° Unit 4 school assessed Coursework
- ° End of Year Examination

Career pathways include:

- ° Childhood Development
- ° Family Studies
- ° Nutrition/Dietetics
- ° Community Services/Youth Studies
- ° Health Promotion

VCE Physical Education

Physical Education examines the biological, social and cultural influences on performance and participation in physical activity. Theory and practice are integrated in this study, which is approached through both the study of, and participation in, physical activity. **Please be aware that this course is based heavily on theory and has minimal practical time.**

Structure

The study is made up of 4 Units:

Unit 1	The human body in motion
Unit 2	Physical activity, sport, exercise and society
Unit 3	Movement skills and energy for physical activity, sport and exercise
Unit 4	Training to improve performance

Unit Outlines

Unit 1	Students explore how the musculoskeletal and cardiorespiratory systems work together to produce and respond to movement. They analyse the relationships between the body systems and movement, and how these systems interact and respond at various intensities. Students investigate injuries of the musculoskeletal system and recommend ways to minimise and manage them. They consider the ethical implications of using permitted and prohibited practices to improve the performance of the body.
Unit 2	Students gain an appreciation of the types of physical activity required for health benefits and the consequences of inactivity and sedentary behaviour. They analyse data to investigate perceived barriers and enablers to physical activity and explore opportunities to enhance participation. Students investigate and critique effective strategies to promoting participation and analyse and consider factors that affect access, inclusion and performance of physical activity.
Unit 3	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.
Unit 4	In this unit students analyse movement skills and fitness requirements and apply relevant training principles and methods to improve performance at various levels. 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 and evaluate its effectiveness.

Levels of Achievement

- ° Unit 3 school assessed Coursework
- ° Unit 4 school assessed Coursework
- ° End of Year Examination

Career pathways include:

- ° Human Movement
- ° Sport Psychology
- ° Sports Marketing
- ° Exercise Science
- ° Education
- ° Physiotherapy
- ° Sports Administration
- ° Sports Medicine

VCE Media

The media have a significant impact on people's lives. The media entertain, educate, inform, and provide channels of communication. The media not only comment on culture, but they also reflect the society which creates them. The study of media includes media forms such as the press, radio, film, TV, and photography, and media processes such as publishing, advertising, news production, and popular culture.

Structure

The study is made up of 4 Units:

Unit 1	Media Forms, Representation and Australian Stories
Unit 2	Narrative Across Media Forms
Unit 3	Media Narratives, Context and Pre-Production
Unit 4	Media Production: Agency and Control in the Media

Unit Outlines

Unit 1	Students develop an understanding of the relationship between the media; technology and the representations present in media forms. Students also develop practical and analytical skills in a study of the production of media products. Students develop an understanding of the features of Australian fictional and non-fictional narratives in different media forms, including Aboriginal and Torres Strait Islander creators.
Unit 2	Students further develop an understanding of the concept of narrative in media products and forms in different contexts. Students analyse the influence of developments in media technologies on individuals and society. Students undertake production activities to design and create narratives that demonstrate an awareness of the structures and media codes and conventions appropriate to corresponding media forms.
Unit 3	Students explore specific codes and narrative conventions and begin the process of research to support their understanding of how they can adopt and employ these techniques in their own works. Students use the pre-production stage of the media production process to design the production of a media product for a specific audience. Students also develop media language and terminology and a deeper understanding of how codes and narrative conventions are combined in a narrative.
Unit 4	Students focus on the production and post-production stages of the media production process. Students refine their media production in response to feedback and through personal reflection. Students explore the media and audiences, focusing on opportunities and challenges afforded by the current developments in the media industry

Levels of Achievement

- ° Unit 3 & 4 School Assessed Coursework
- ° Unit 3 & 4 School Assessed Task (folio)
- ° End of Year Examination

Career Pathways

- ° Illustration & Animation
- ° Photographer
- ° Videographer
- ° Media Production
- ° Media
- ° Film
- ° Game design
- ° Advertising
- ° Events
- ° Designer
- ° Journalism
- ° Marketing
- ° Digital & Interactive

VCE Art Making and Exhibiting

Art: Making and Exhibiting introduces students to the methods used to make artworks and how they are presented and exhibited. Students use inquiry learning to explore, develop and refine the use of materials, techniques, and processes to develop their knowledge and understanding of the ways artworks are made. Students 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. Visiting and viewing exhibitions, encourages students to broaden and develop their own ideas and thinking around their own art making and practice.

Structure

The study is made up of 4 Units:

Unit 1	Explore, expand and investigate
Unit 2	Understand, develop and restore
Unit 3	Collect, extend and connect
Unit 4	Consolidate, present and conserve

Unit Outlines

- | | |
|--------|---|
| Unit 1 | The focus of this unit is to explore the different ways artists use materials, techniques, and processes. The exploration and experimentation with materials and techniques stimulate ideas, inspire different ways of working and enables a broad understanding of specific art forms. Exploration and experimentation is documented in both visual and written form using a visual arts journal. |
| Unit 2 | The focus of this unit is to continue to research how artworks are made and by investigating how artists use aesthetic qualities to represent ideas in artworks. Students respond to a set theme and progressively develop their own ideas. Students learn how to develop their ideas using materials, techniques, and processes as well as art elements and principles. Students consolidate these ideas to plan and make finished artworks. Students also begin to understand how exhibitions are planned and designed. |
| Unit 3 | The focus of this unit is to actively engage in art making using materials, techniques, and processes. Students explore the contexts, subject matter, and ideas to develop artworks in imaginative and creative ways. Students investigate how artists use visual language to represent ideas and meaning in artworks. The visual journal is used to document their ideas to plan and develop artworks. |
| Unit 4 | The focus of this unit is to make connections to the artworks they have made by consolidating and extending their ideas. Further refinement and progressive resolution of artworks in specific art forms is documented in the student's visual journal. Here they demonstrate their technical skills in a specific art form as well as their refinement and resolution of subject matter, ideas, and style. Student also reflect on their finished artworks and evaluate the materials, techniques and processes used to make them. |

Levels of Achievement

- ° Unit 3 & 4 School Assessed Coursework
- ° Unit 3 & 4 School Assessed Task (folio)
- ° End of Year Examinations

Career Pathways

- | | | |
|----------------|-----------------------|----------------------|
| ° Painter | ° Printmaker | ° Gallery educator |
| ° Photographer | ° Designer | ° Art technician |
| ° Illustrator | ° Curator | ° Gallery promoter |
| ° Educator | ° Exhibition designer | ° Art conservator |
| ° Photographer | ° Art therapist | ° Arts administrator |

VCE 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.

Structure

The study is made up of 4 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 Outlines

- Unit 1** 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. They draw on these new insights to determine communication needs and prepare design criteria in the form of a brief.
- Unit 2** 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.
- Unit 3** 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. Students will prepare a single brief for a real or fictional client that defines two distinct communication needs.
- Unit 4** 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.

Levels of Achievement

- ° Unit 3 & 4 School Assessed Coursework
- ° Unit 3 & 4 School Assessed Task (folio)
- ° End of Year Examination

Career Pathways

- ° Illustration & Animation
- ° Photo/videographer
- ° Industrial Design
- ° Architecture
- ° Interior Design
- ° Film
- ° Game design
- ° Advertising
- ° Web Design
- ° Events
- ° Designer
- ° Journalism
- ° Marketing
- ° Fashion Design
- ° Digital & Interactive Media

Victorian Certificate of Education – Vocational Major (VCE VM) and Victorian Pathways Certificate (VPC)

VCE VM & VPC

VCE–VM and VPC Overview

The Victorian Certificate of Education – Vocational Major (VCE VM) is a **senior secondary certificate** designed for students who thrive in an **applied learning** environment. It focuses on practical, hands-on learning and provides clear pathways into employment, apprenticeships, traineeships, or further vocational education and training.

The Victorian Pathways Certificate (VPC) is **not a senior secondary certificate**. It is designed for students who require **additional learning support** or who may not yet be ready to undertake the VCE. The VPC helps students build the skills, knowledge, and confidence to move into the VCE, VCE VM, or other training and employment pathways. Both certificates sit alongside VCE and VET programs to give students a wider range of meaningful education and career options.

Enrolment in the VPC is determined in consultation with parents or carers. As such, subject descriptions for the VPC are not included in this handbook.

VCE VM Outline

The **VCE Vocational Major (VCE VM)** is a two-year senior secondary certificate designed for students who thrive in an **applied learning** environment, through hands-on experiences, practical tasks, real-world projects, and workplace learning. It connects classroom learning to life outside of school, helping students build skills that are directly relevant to future work and further training.

To successfully complete the VCE – Vocational Major (VCE-VM), students must finish a set number of units as outlined by the Victorian Curriculum and Assessment Authority (VCAA).

This includes completing subjects from the following Five key areas:

- Literacy Skills
- Numeracy Skills
- Work Related Skills
- Personal Development Skills
- VET (Vocational Education and Training) course

Vocational Education and Training:

Students interested in enrolling in a VET course should refer to the [2026-wyndham-vetdss-cluster-handbook-08.04.2026.pdf](#) and visit the [VCAA 'Get VET' webpage](#) for additional information and guidance.

VCE VM Literacy

VCE Vocational Major Literacy focuses on developing the knowledge and skills required to understand and create purposeful, accurate, and effective texts with confidence and fluency. Students engage with texts from a range of real-world contexts, with a strong focus on communication relevant to the workplace and active participation in the community.

Structure

This study is made up of 4 Units:

- Unit 1: Literacy for personal use and the understanding and creating digital texts.
- Unit 2: Understanding issues and voices and Responding to Opinions
- Unit 3: Accessing and understanding informational, organisational and procedural texts; Creating and responding to organisational, informational or procedural texts.
- Unit 4: Understanding and engaging with literacy for advocacy; Speaking to advise or to advocate

Unit Outlines

Unit 1: In this unit, students focus on the structures and features of a range of texts – print, visual and film – and the personal reasons readers may have for engaging with these texts. Students will read or watch a variety of texts for a personal purpose, such as finding information.

Unit 2: In this unit, students will engage in issues that are characterised by disagreement or discussion. Students will consider the values and beliefs that underpin different perspectives and how these values create different biases and opinions, including thinking about how these issues might arise vocational or workplace settings.

Unit 3: In this unit, students will learn to recognise, analyse and evaluate the structures and semantic elements of informational, organisational and procedural texts as well as discuss and analyse their purpose and audience.

Unit 4: In this unit, students will consider which elements are important for creating a 'brand' (including personal branding) and how different texts, images, products and multimedia platforms work together to produce one, central message to influence an audience.

Career pathways include:

- Writer
- Designer
- Nurse
- Illustrator
- Builder
- Social Worker
- Electrician
- Education Support
- Legal Assistant
- Photographer
- Art therapist
- Hairdresser

VCE VM Numeracy

VCE Vocational Major Numeracy develops students' practical mathematical skills to navigate personal, work, and community life. The study focuses on real-world problem solving in local, national, and global contexts, using appropriate technologies. Students explore key concepts such as number, measurement, shape, data, and chance, while building their ability to apply mathematical thinking for everyday and social purposes.

Structure

This study is made up of 4 units:

- Unit 1: Focus on number, shape, quantity & measures, and relationships
- Unit 2: Focus on dimension & direction, data, uncertainty and systematics
- Unit 3: Focus on number, shape, quantity & measures, and relationships
- Unit 4: Focus on dimension & direction, data, uncertainty and systematics

Unit Outlines

Units 1 Students will develop their numeracy practices to make sense of the personal, public, and vocational lives. They develop mathematical skills with consideration of their local, community, national and global environments and contexts, and an awareness and use of appropriate technologies.

Units 2: These units provide students with the fundamental mathematical knowledge, skills, understandings, and dispositions to solve problems in real contexts for a range of workplace, personal, further learning, and community settings relevant to contemporary society.

Unit 3: In this unit, students further develop and enhance their numeracy practices to make sense of their personal, public and vocational lives. Students extend their mathematical skills with consideration of their local, community, national and global environments and contexts, and the use and evaluation of appropriate technologies.

Unit 4: In this unit, students further develop, enhance and extend their numeracy practices to make sense of their personal, public and vocational lives. Students extend their mathematical skills with consideration of their local, community, national and global environments and contexts, and use of, evaluation and justification of appropriate technologies.

Careers Pathways Include:

- Electrician
- Carpenter
- Child care
- Chef/Cook
- Nurse
- Builder
- Education Support
- Art therapist
- Tax Agent
- Real Estate
- Tourism
- Hairdresser

VCE VM Work Related Skills

VCE Vocational Major Work Related Skills (WRS) examines a range of skills, knowledge, and capabilities relevant in 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.

Structure

This study is made up of 4 Units:

- Unit 1: Careers and learning for the future
- Unit 2: Workplace skills and capabilities
- Unit 3: Industrial relations, workplace environment and practice
- Unit 4: Portfolio preparation & presentation

Unit Outlines

Unit 1: This unit recognises the importance of sourcing reliable information relating to future education and employment prospects to engage in effective pathway planning and decision-making.

Unit 2: In this unit, students will consider the distinction between essential employability skills, specialist and technical work skills and personal capabilities, and understand the importance of training and development to support the attainment and transferability of skills.

Unit 3: In this unit, students will learn how to maintain positive working relationships with colleagues and employers, understanding the characteristics of a positive workplace culture and its relationship to business success.

Unit 4: In this unit, students will develop and apply their knowledge and skills relating to portfolios, including the features and characteristics of a high-quality physical and/or digital portfolio. The unit culminates in the formal presentation of a completed portfolio in a panel style interview and an evaluation of the end product.

Careers pathways included:

- Electrician
- Carpenter
- Child care
- Chef/Cook
- Nurse
- Builder
- Education Support
- Art therapist
- Human Resources
- Civil Construction
- Tourism
- Hairdresser

VCE VM Personal Development Skills

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 as members of their community. PDS explores concepts of effective leadership, self-management, project planning and teamwork to support students to engage in their work, community and personal environments.

Structure

This study is made up of 4 units:

- Unit 1: Healthy individuals
- Unit 2: Connecting with community
- Unit 3: Leadership and teamwork
- Unit 4: Community Project

Unit Outlines

Unit 1: This unit focuses on the development of personal identity and individual pathways to optimal health and wellbeing. Students will investigate the elements of emotional intelligence and begin to develop an awareness of interrelationships between communities and the health and wellbeing of individuals.

Unit 2: This unit focuses on the benefits of community participation and how people can work together effectively to achieve a shared goal. Students will look at the relationships between active citizenship, empathy and connection to culture and individual health and wellbeing.

Unit 3: In this unit, students will examine leadership qualities and the characteristics of effective leaders and how these qualities can be applied to the achievement of goals within personal and community contexts.

Unit 4: In this unit, students will engage in a process of planning, implementing and evaluating a response to a selected community issue.

Career Pathways Include:

- Electrician
- Carpenter
- Child care
- Chef/Cook
- Nurse
- Builder
- Education Support
- Art therapist
- Social Worker
- Youth Work
- Tourism
- Hairdresser

VET Courses on offer for 2027

(Subject to availability)

What is VET?

VET stands for **Vocational Education and Training**, and as referenced by the **VCAA** (Victorian Curriculum and Assessment Authority), it refers to nationally recognised vocational certificates that **students can undertake as part of their senior secondary certificate**—either the **VCE (Victorian Certificate of Education)** or the **VCE Vocational Major (VCE VM)**.

- **VET programs are delivered by registered training organisations (RTOs)** and are usually integrated into school programs through partnerships between schools and RTOs (including TAFEs).
- **VET leads to nationally recognised qualifications**, such as **Certificate II** or **Certificate III** levels, which can contribute to further training, employment, or tertiary education.
- VET programs are **hands-on, industry-focused**, and **skills-based**, and provide students with the opportunity to:
 - Gain **workplace experience**
 - Earn **credit towards their senior secondary certificate**
 - Begin **training in a specific industry area**

Examples of VET industries:

- Hospitality
- Health and Community Services
- Building and Construction
- Business
- Creative Industries
- Agriculture

In VCE and VCE VM:

- **VET may contribute to the ATAR** (if it's a scored VET program in VCE).
- In **VCE VM**, VET is **compulsory**. Students must complete a minimum number of VET units as part of the qualification.

Students interested in enrolling in a VET course should refer to the [2026-wyndham-vetdss-cluster-handbook-08.04.2026.pdf](#) and visit the [VCAA 'Get VET' webpage](#) for additional information and guidance.

Wyndham VET Cluster

Students who are interested in enrolling in a VET course should:

- Refer to the **Wyndham VET Cluster Handbook 2026** for detailed course information.
- Visit the **VCAA 'Get VET' webpage** for additional advice and guidance about studying VET.
- Submit an **Expression of Interest (EOI)**/ complete an **enrolment** via the **WYNBAY LLEN website**:
<https://www.wynbayllen.org.au/vet-courses/wyndham-vet-enrolments>
This step is required to be considered for a VET placement

Scored VET in VCE and VCE VM

VET may contribute to the ATAR (if it's a scored VET program in VCE).

- ALLIED HEALTH ASSISTANCE (Partial Completion)
- COMMUNITY SERVICES
- BUSINESS
- DANCE: Year 1 (Partial Completion)
- ENGINEERING STUDIES
- MUSIC (PERFORMANCE)
- MUSIC (SOUND PRODUCTION)
- HOSPITALITY: Year 1 (Dual Certificate)
- INFORMATION TECHNOLOGY
- SPORT AND RECREATION Year 1
- SPORT, AQUATICS AND RECREATION Year 2

Unscored VET for VCE VM students only. A VET is compulsory for all VCE VM students

- AGRICULTURE
- ALLIED HEALTH ASSISTANCE (Partial Completion)
- ANIMAL CARE
- APPAREL, FASHION AND TEXTILES
- AUTOMOTIVE VOCATIONAL PREPARATION
- BEAUTY SERVICES (PARTIAL COMPLETION)
- BUILDING & CONSTRUCTION (**BRICKLAYING** PRE-APPRENTICESHIP)
- BUILDING & CONSTRUCTION (**CARPENTRY** PRE-APPRENTICESHIP)
- BUSINESS
- CHRISTIAN MINISTRY AND THEOLOGY
- CIVIL CONSTRUCTION
- COMMUNITY SERVICES (Partial Completion)
- COOKERY
- DANCE (Partial Completion)
- EARLY CHILDHOOD EDUCATION & CARE (PARTIAL COMPLETION)
- ELECTROTECHNOLOGY STUDIES
- EMERGING TECHNOLOGIES
- ENGINEERING STUDIES
- HEALTH SERVICES ASSISTANCE
- HORTICULTURE
- HOSPITALITY & COOKERY (Dual Program)
- INFORMATION TECHNOLOGY
- MUSIC (SOUND PRODUCTION)
- PLUMBING
- SPORT AND RECREATION & SPORT, AQUATICS AND RECREATION (Dual Program)
- VISUAL ARTS

Glossary of Educational Terms

ATAR	Australian Tertiary Admissions Rank. A score is generated from the students' study score.
GAT	A general knowledge examination undertaken by all students who are undertaking Units 3 or 4. The GAT is used by VCAA as means of verifying grades or deriving a score.
Learning Outcomes	Learning Outcomes are the basis of satisfactory completion of VCE units. There are approximately 2-4 Learning Outcomes per unit of study. Student must be able to demonstrate their achievement of each learning outcome.
Prerequisite subject	These are units that must be satisfactorily complete (or to stated standard) before a student is eligible for selection into a specific Tertiary course.
SAC	School Assessed Coursework are assessment tasks that are specified in the Study Design set by VCAA. Teachers set SACs that students must complete satisfactorily.
SAT	School Assessed Tasks are completed in subjects that produce a product or model. The Unit 3 & 4 work receives a score based on the quality of the work.
Study Score	A score out of 0-50, which sums up the students total achievement in all work set in each unit of work. It is based on internal assessment and external examinations. Only applies to units 3 & 4.
Study Design	A 'study' is broken up into four units. Each VCE study unit is numbered 1, 2, 3 or 4. Student programs may include some Units 1 and 2 in the second or final year and/or some Units 3 and 4 in the first year. Study Designs, assessment advice and other teacher support materials relating to that study.
Trade Training Centre	Specialist facility established to provide training in current industry practices in designated high demand skill areas.
Unit	A self-contained study of approximately one semester or commonly referred to as a subject.
VCAA	Victorian Curriculum Assessment Authority – body responsible for the administration of VCE/ VCE-VM/VET in Schools.
VCE	Victorian Certificate of Education. A senior school certificate based mainly on theoretical learning.
VCE VM	Victorian Certificate of Education – Vocational Major. A senior school certificated delivered using an applied learning approach
VPC	Victorian Pathway Certificate. A certificate designed for students previously not engaged in school or who require additional support. It is not a senior certificate.
VET	Vocational Education and Training. Industry endorsed certificates and comprised of units of competency enable students to achieve joint VCE and TAFE qualifications.
VTAC	The Victorian Tertiary Admissions Centre. The Centre processes student applications to the majority of tertiary institutions.



The Grange
P-12 COLLEGE

The Grange P-12 College

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