Bairnsdale SECONDARY COLLEGE

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Nerran SCIENCE CENTRE

Yenella WELLBEING HUB

SENIOR YEARS 10, 11 AND 12 HANDBOOK 2027

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Welcome to your senior secondary journey at Bairnsdale Secondary College.

As you consider your options think carefully and choose wisely, plan well and be considerate and strategic. The choices that you are about to make will be co-designed with staff and your families to enable you to increase your chances of successfully moving to further education, training, or work.

With consideration of your future career aspirations, plan towards the realisation of your ambitions by building a strong foundation in Year 10 that will enable a clear and defined pathway into Year 11 and 12.

Most Year 11 students will undertake the VCE or VCE VM (Vocational Major). However, if you have previously studied a Unit 1 and 2 subject as a part of your Year 10 course, you may consider undertaking Units 3 and 4 of that subject in Year 11. There are also options to select a mix of VCE and VCE VM subjects to build your own unique VCE program. In every case, the Senior Hub and Careers Practitioners will be in the best position to advise you about this option.

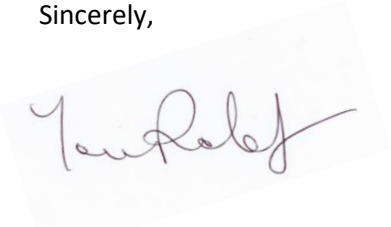
Be sure to thoroughly explore the differences between the VCE and VCE VM (Vocational Major) programs and to make informed and sensible decisions. Ask for guidance from the staff, and also other students who have completed similar courses.

Another important factor in achieving success at the VCE/VCE VM level is for you, your teachers, and parents to work together as a team. Regular communication along the way is critical.

In your senior years at Bairnsdale Secondary College, you will need to be dedicated and committed to making the most of the fantastic opportunities before you. Lean on your families, your friends, and your teachers to support and guide you toward the next steps in your lives.

I wish each and every one of you all the very best.

Sincerely,



Tony Roberts
Principal

This handbook contains information about Year 10, 11 and 12 at Bairnsdale Secondary College. It includes subject information for Year 10, unit descriptions for the Victorian Certificate of Education (VCE), the Victorian Certificate of Educational Major (VCE VM), the Victorian Pathways Certificate (VPC) and Vocational Education and Training (VET).

Year 9, 10 and 11 students and their parents/carers should use the information and advice contained in this handbook to assist them in deciding on appropriate senior courses of study.

The *BSC VCE / VCE VM Delivery and Assessment Policy* and *VPC Delivery and Assessment Policy* must be read in conjunction with this handbook.

Victorian Curriculum and Assessment Authority (VCAA)

The VCAA is an independent statutory body responsible to the Victorian Minister for Education, serving both government and non-government schools. Their website provides access to a wide range of information relating to VCE, VET, VPC and VCE VM units: www.vcaa.vic.edu.au.

For more information about the rules and regulations of VCE, VCE VM, VPC and VET, visit: www.vcaa.vic.edu.au/schooladmin/handbook.

Victorian Tertiary Admissions Centre (VTAC)

VTAC is the central office that administers the application processes for places in tertiary courses, scholarships and special entry access schemes at university, TAFE, and independent tertiary colleges in Victoria (and a few outside Victoria). VTAC receives and forwards application information and supporting documentation to the relevant authorities at institutions.

Before applying for courses or scholarships, or booking an admission test, students will register for a VTAC user account. The College's Careers team will assist students with this. VTAC opens for applications just after mid-year. Some features of the website enable students to research courses, search for information about Australian Tertiary Admission Rank (ATAR) and set up accounts in CourseLink to keep track of course information.

For more information about VTAC, visit: www.vtac.edu.au.

SENIOR HUB STAFF

The following College staff members can assist students and parents/carers when planning senior courses of study. We encourage you to contact any of our staff members by calling the College directly on 03 5150 4800.

ROLE	STAFF NAME
Senior College Principal Year 10, 11 and 12	Jacqui Telford
Leading Teacher Hub/ VCE **Leading Teacher Hub/ VCE Vocational Major** **Leading Teacher/Pathways**	Justin Garry Sam Poynton Erin McLeod
Year 11 and 12 **Year Level Coordinator**	Mitchell Hewett
Year 10 **Year Level Coordinator** **Year Level Coordinator**	Marinda Kellow Tash Chandler
VASS Administrator / Transition Officer	Yvonne Rooney
Careers Manager **Carers Practitioner** **Careers Practitioner/VET support**	Angela Wren Liz Stevens Vicky Halford
Attendance Officer **Enrolment Officer**	Amy Robertson Michelle Boyle
Administration Officer	Sandy Hirst

INTRODUCTION TO COURSE SELECTION PROCESSES

This handbook has been developed to support the Senior School Subject Selection process for students, parents, and carers. This guide provides lots of information about the subjects offered to senior students at Bairnsdale Secondary College. Students and their parents/carers are encouraged to undertake thorough additional research into the pathway that best suits them. The student involved should find as much information as possible to help make important decisions about their senior courses of study.

The course selection process at the College usually begins in Term 2 each year. Students will receive information on the Victorian Certificate of Education (VCE), Victorian Certificate of Education Vocational Major (VCE VM) and Vocational Education and Training (VET) courses. Students and their parents/carers will consider the pathways that best suit their future aspirations.

Important event dates are published on the College website.

My Career Portfolio – My Career Action Plan

My Career Action Plan is designed to support students with resources to capture their career goals and plans, share their skills, experiences, and accomplishments, and store all the information they will need to plan their education and career pathways. All students will complete their year level *Career Action Plan* prior to meeting with their Course Counsellor.

Students also revisit their Morrisby Careers Profile completed in Year 9 to support their decision making.

It is during this time that Year 9, 10 and 11 students will select the course of study they plan to undertake in 2027, including applications for accelerated studies. Students and families will have the opportunity to attend an online information session and are invited to make an appointment with a Course Counsellor if they choose to. Once each student's preferences for a course of study for 2027 is finalised, the College will begin to construct the 2027 timetable.

We anticipate that student and subject groupings for 2027 should be finalised by Term 3.

Towards the end of the 2026 school year, students will commence the Transition program. Students will begin classes for their 2027 timetable and be given work to complete over the holiday period.

Bairnsdale Secondary College Careers webpage

The College website hosts our Careers home page, which is a one-stop site for careers information, events, career planning and much more. We invite students and parents/carers to explore each of the tabs, widgets and functions:

- Work experience opportunities
- Events
- Open Days
- Scholarships

Visit the Careers home page for more information: Bairnsdale Secondary College – Study Work Grow Education

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YEAR 10

In Year 10, students pursue an individual learning path which supports their individual career and educational pathways. Students must select English, Mathematics and at least one Science or Humanities subject.

Whole Year Units	Semester Units
English	Science or Humanities (elective)
Mathematics: Numeracy, General OR Extension	

In addition to English and Maths, students will select 6 electives, including the required Science or Humanities subject.

ENGLISH

This subject runs for 2 semesters (one year).

Receptive Modes (Listening, Reading and Viewing)
Students understand how to evaluate the innovative ways text structures can be used by different authors. They explain how the choice of language features, images, and vocabulary contribute to the development of individual style. Students develop and justify their own interpretations of texts, evaluate other interpretations, and analyse the evidence used to support them. They listen for the ways features within texts can be manipulated to achieve different effects.

Productive Modes (Speaking, Writing and Creating)
Students show how the selection of language features can achieve precision and stylistic effect. They explain different viewpoints, attitudes, and perspectives through the development of cohesive and logical arguments. Students develop their own style by experimenting with language features, stylistic devices, text structures, and images.

Students create a wide range of texts to articulate complex ideas. They make presentations and contribute actively to class and group discussions. They build on others' ideas to solve problems, justify opinions, and develop and expand arguments. Students demonstrate their understanding of grammar, vary vocabulary choices for impact, and accurately use spelling and punctuation when creating and editing texts.

MATHEMATICS: NUMERACY

OPTION 1: MATHEMATICS (NUMERACY)

This subject runs for 2 semesters (one year).

In year 10 Numeracy students focus on building their capacity to use the skills of Mathematics in a range of everyday scenarios. Students explore how Maths can be used to help them in setting and achieving personal goals; managing finances at home, work and in the community; building healthy habits; and planning for events.
In *Personal Numeracy*, students:

- Collect, present and analyse information about themselves, their community and wider society
- Use correct statistical language to describe trends and patterns
- Calculate and use rates to describe change
- Use time calculations to plan travel, and events

In *Financial Numeracy,* students:

- Explore budgeting at home and for community events
- Use percentages to calculate pay, tax and interest
- Investigate options for saving money including using investment account
- Learn to manage loans and debt including personal loans and credit card debt

In *Vocational Numeracy,* students:

- Collect data on job opportunities in the local area
- Use measurement tools and processes relevant to an area of work of interest to them
- Use rates and ratios to assist with measurement processes
- Use simple formulas to calculate distance, area, volume, capacity and dosage

In *Health and recreational numeracy,* students:

- Use and convert between appropriate measurement to record health data
- Collect numerical information to set goals and evaluate progress
- Recognise, construct and categorise shapes in everyday activities
- Explore applications of similar and congruent shapes when exploring spaces
- Calculate distance, area, volume and capacity when creating health plans

In *Civic Numeracy,* students:

- Use probability tools to assess risks in a range of scenario's including when driving
- Use rates and ratios to explore patterns and changes
- Describe the relationships using patterns and rules

This unit leads to VCE VM Numeracy

MATHEMATICS: GENERAL

OPTION 2: MATHEMATICS (GENERAL)

This subject runs for 2 semesters (one year).

In *Number and Algebra*, students will:

- connect the compound interest formula to repeated applications of simple interest using appropriate digital technologies
- factorise and expand a variety of algebraic expressions using a range of skills and techniques and substitute values into formulas to determine an unknown
- solve problems involving a range of linear equations and inequalities algebraically and by using graphical techniques
- explore the connection between algebraic and graphical representations of relations such as simple quadratics, circles and exponentials using digital technology
- solve simple quadratic equations using a range of strategies.

In *Measurement and Geometry*, students will:

- solve problems involving surface area and volume for a range of prisms, cylinders, and composite solids
- formulate proofs involving congruent triangles and angle properties
- apply logical reasoning to proofs and numerical exercises involving plane shapes
- solve right-angled triangle problems including those involving direction and angles of elevation and depression.

In *Statistics and Probability*, students will:

- describe the results and assign probabilities for a range of two and three-step chance experiments
- investigate the concept of independence and improve their understanding of the language used in probability
- calculate and interpret statistical measures such as quartiles and interquartile range
- construct, compare, and interpret box plots, histograms, scatterplots, and dot plots
- investigate and describe bivariate numerical data where the independent variable is time
- evaluate statistical reports in the media and other places by linking claims to displays, statistics, and representative data.

This unit leads into VCE General Mathematics or VCE VM Mathematics.

MATHEMATICS: EXTENSION

OPTION 3: MATHEMATICS (EXTENSION)

This subject runs for 2 semesters (one year).

In *Number and Algebra*, students will:

- define rational and irrational numbers and perform operations with surds and fractional indices
- use the definition of a logarithm to establish and apply the laws of logarithms and investigate logarithmic scales in measurement
- investigate the concept of a polynomial and apply the factor and remainder theorems to solve problems
- devise and use algorithms and simulations to solve mathematical problems
- describe, interpret, and sketch parabolas, hyperbolas, circles, and exponential functions and their transformations
- solve simple exponential equations
- apply understanding of polynomials to sketch a range of curves and describe the features of these curves from their equation
- factorise monic and non-monic quadratic expressions and solve a wide range of quadratic equations derived from a variety of contexts
- use function notation to describe the relationship between dependent and independent variables in modelling contexts
- solve simultaneous equations using systematic guess-check-and-refine with digital technology.

In *Measurement and Geometry*, students will:

- solve problems involving surface area and volume of right pyramids, right cones, spheres, and related composite solids
- prove and apply angle and chord properties of circles
- establish the sine, cosine and area rules for any triangle and solve related problems
- use the unit circle to define trigonometric functions as functions of a real variable, and graph them with and without the use of digital technologies
- solve simple trigonometric equations
- apply Pythagoras' theorem and trigonometry to solving three-dimensional problems in right-angled triangles.

In *Statistics and Probability*, students will:

- investigate reports of studies in digital media and elsewhere for information on their planning and implementation
- calculate and interpret the mean and standard deviation of data and use these to compare data set
- Investigate the effect of individual data values, including outliers, on the standard deviation
- Use digital technology to investigate bivariate numerical data sets. Where appropriate use a straight line to describe the relationship allowing for variation, make predictions based on this straight line, and discuss limitations.

This unit leads into VCE Mathematical Methods, Specialist Mathematics or General Mathematics

CURRICULUM AREA	SUBJECT	Units
THE ARTS	Art Creating and Making	1
	Digital and Dark Room Photography	1
	Drama: Theatre Studies	1
	Drawing	1
	Media	1
	Visual Communication Design	1
ENGLISH	Creative Writing	1
HUMANITIES	Personal Finance and Business Studies	1
	Legal Studies	1
	Modern History	1
	Sociology	1
HEALTH and PHYSICAL EDUCATION	Physical Education	1
	Outdoor Education	1
	Gym	1
	AFL	1
	Basketball	1
	Health and Leisure	1
SCIENCE	Applied Science	1
	Biology	1
	Chemistry	1
	Environmental Science	1
	Psychology	1
	Physics	1
INFORMATION TECHNOLOGY	Designing and Developing Games	1
	DIY Computer Systems	1
TECHNOLOGY	Automotive: Industrial Technology	1
	Scale Motorsports	1
	Wood Design	1
	Metal Design	1
	System Design and Robotics	1
	Modern Food Practices	1
	Food For You	1

SUBJECT SELECTION

Students and their families will have an opportunity to select subjects with the support of a member of the Senior pathways hub team during an interview at the College. Students are encouraged to discuss subjects and senior pathways with their families and teachers in preparation for subject selection.

In selecting subjects, one subject must be selected from each of the pre allocated lines. Any accelerated subjects or VET units will be selected during the subject selection process.

Year 10 2027

Year 10				
1	**2**	**3**	**4**	**5**
English	English	English	English	English
	Maths: General	Maths: General	Maths: General	Maths: General
	Maths: Numeracy	Maths: Numeracy	Maths: Numeracy	Maths: Numeracy
		Maths: Extension	Maths: Extension	Maths: Extension

Semester 1				
Art Creating and Making	Drama: Theatre Studies	Physical Education	Outdoor Education	Physical Education
AFL (Girls)	Gym	Modern History	Health and Leisure	Sociology
AFL (Boys)	Environmental Science	Wood Design	Visual Communication Design	Personal Finance and Business Studies
Legal Studies	DIY Computer Systems	Media	Legal Studies	Physics
Food For You	Physical Education	Psychology	Automotive: Industrial Technology	Modern Food Practices
System Design and Robotics	Food For You		Biology	Scale Motorsports
Chemistry	Metal Design			

Semester 2				
Drawing	Creative Writing	Gym	Outdoor Education	Gym
Basketball	Physical Education	Modern History	Health and Leisure	Sociology
Legal Studies	Metal Design	Media	Digital and Darkroom Photography	Personal Finance and Business Studies
Modern Food Practices	Designing and Developing Games	Psychology	Modern History	Physics
Automotive: Industrial Technology	Gym	Wood Design	System Design and Robotics	Food for You
Chemistry	Modern Food Practices		Biology	Automotive: Industrial Technology
	Applied Science			

*External VET subjects may be incorporated into the timetable

ACCELERATED VCE AND VET STUDIES IN YEAR 10

The subjects below may be suitable for some Year 10 students to undertake as an accelerated VCE or VET program. Year 11 students will be prioritised in the selection process. This opportunity is available to students who have maintained an excellent academic and attendance record.

CURRICULUM AREA	VCE – Application Required	Units
THE ARTS	Art Creative Practice	2
	Art Making and Exhibiting	2
	Theatre Studies	2
	Visual Communication Design	2
HUMANITIES	Economics	2
	Business Management	2
	Modern History	2
	Legal Studies	2
	Sociology	2
HEALTH and PHYSICAL EDUCATION	Health and Human Development	2
	Physical Education	2
	Outdoor and Environmental Studies	2
SCIENCE	Biology	2
	Environmental Science	2
	Psychology	2
TECHNOLOGY	Food Studies	2
	Product Design and Technology	2
	Systems Engineering	2
VET (on campus only)	Certificate III Information Technology	2
	Certificate II Cookery	2
	Certificate II Sport and Recreation	2

ART CREATING AND MAKING

Art Creating and Making will work on themes and allow students to explore a variety of materials, techniques, and processes of their choice. Art forms that students can choose to explore are painting, sculpture, mixed media, drawing, printmaking, ceramics, and textiles. Allowing broad choices and experiences will assist students to transition into VCE.

Students will:

- explore and experiment with various materials and different art styles
- have the opportunity to develop their own art ideas from the beginning to finished artworks, using the art process
- make informed choices when applying the art elements and principles to interpret a variety of themes to create effective communication as they develop their personal style
- maintain a visual diary documenting their personal learning progress, including trialling of materials, development and refinement of ideas, annotation, as well as an evaluation of completed pieces
- create, present, analyse, and evaluate displays of artwork considering how ideas can be conveyed to an audience
- use appropriate Arts language to discuss and analyse artworks to discover their meaning.

Recommended as preparation for VCE Art Creative Practice, and Art Making and Exhibiting.

DIGITAL AND DARKROOM PHOTOGRAPHY

In this unit students will learn how to use SLR cameras for both film and digital photography. This may include:

- using large telephoto lenses and macro lenses, tripods, and other accessories
- studio photography using professional studio lights, reflectors and backdrops, costumes, and props
- using film SLR cameras, developing black and white films, and printing them in the school darkroom
- creative darkroom techniques
- using semi-professional digital SLR cameras to explore advanced settings and techniques such as very fast shutter speeds
- using Photoshop techniques to enhance digital images
- using a range of ideas and themes, including negotiated topics of students' own choice
- investigating the work of professional photographers to look at different styles and techniques.

Recommended as preparation for VCE Art Making and Exhibiting, and VCE Art Creative Practice.

DRAMA: THEATRE STUDIES

Students undertaking this unit will:

- develop their expressive skills (voice, movement, facial expression, and gesture) through improvisations and drama activities
- work on creating and presenting a character and experience the process of rehearsal and refinement
- explore the process of planning, developing, and presenting theatre scripts.
- choose one of the following roles to specialize in: acting, directing, costuming, set, sound, lighting, props, hair, and make-up.
- work collaboratively to produce small excerpts from theatre scripts for an audience
- view and analyse professional work.

Recommended as preparation for VCE Theatre Studies.

DRAWING

Drawing explores a variety of media including pencil, colour pencil, pastel, ink, charcoal, and mixed media. Students create artworks inspired by their imagination, life observations and by artists.

Students will:

- make informed choices on the use of the art elements and principles to create effective communication in their art as they develop their own style
- trial different media to develop their technical drawing skills
- maintain a visual diary with records of all the stages of the art process and production of their work, as well as an evaluation of completed pieces
- have the opportunity to develop their own art ideas from the beginning to finished artworks, using the art process
- use appropriate Arts language to discuss and analyse artworks and discover their meaning.

Recommended as preparation for VCE Art Creative Practice, and Art Making and Exhibiting.

MEDIA

Students completing this unit will further develop their skills in media production, storytelling and analysis. They will explore documentary filmmaking and short film production, while developing confidence in planning, filming, editing, scripting and reflecting on their creative choices.

Students will:

- investigate and analyse documentary filmmaking
- create a 1–2-minute documentary using appropriate conventions
- complete an analysis essay on a media text
- develop a treatment, storyboards and script for a final short film
- create a 3–5-minute short film using cinematography, sound, editing and mise-en-scène
- reflect on their creative choices and production process
- use appropriate Media Arts language to analyse and evaluate media products.

Recommended as preparation for VCE Media.

VISUAL COMMUNICATION DESIGN

Students explore how visual communication design is used to communicate ideas, identity, and purpose across multiple design fields. Through a sustainability-focused design brief, students develop a professional design brand for an environmentally friendly housing or building company while learning how designers create visual solutions for real-world audiences and needs.

The subject follows the VCD Design Process: Discover, Define, Develop, and Deliver. Students investigate how designers work across the design fields of Messages, Environments, and Interactive Experiences, using both traditional and digital methods to create and present design outcomes.

Students will:

- develop a visual identity and branding package for a sustainable housing or building company
- create logos, typography systems, colour palettes, and brand guidelines
- explore architectural and environmental design through building and property concepts
- design interactive experiences through the creation of a mock business website
- develop skills in layout, perspective drawing, rendering, digital illustration, and presentation methods
- use industry-standard software such as Adobe Illustrator to create professional design outcomes
- research designers, architecture, sustainability, and contemporary design practices
- document design thinking, experimentation, and refinement in a visual diary
- apply the design elements and principles to communicate effectively with a target audience.

Students build creative, technical, and problem-solving skills while gaining insight into pathways in graphic design, architecture, interior design, branding, web design, and other creative industries.

Recommended as preparation for VCE Visual Communication Design.

CREATIVE WRITING

Students taking Creative Writing will undertake an in-depth study of various genres, including fantasy, sci-fi, history, mystery, script writing, and poetry. They will create a range of texts and focus on the craft of writing. Students will need to have a keen interest in writing and a familiarity with word processing tools would be an advantage. This subject will cover content from the Victorian Curriculum strands of *Reading and Viewing* and *Writing*.

PERSONAL FINANCE AND BUSINESS STUDIES

Students undertaking this unit will:

- develop their knowledge and understanding of how to effectively manage money so that personal goals can be achieved
- investigate some of the important financial decisions that they will make in the next few years, for example, managing credit cards, learning about after pay, buying a first car, and leaving home
- improve their financial literacy through the study of topics such as budgeting, superannuation, and tax
- participate in the Australian Stock Exchange online trading game to assist in developing knowledge in building a personal share portfolio.

Recommended as preparation for VCE Economics and VCE Business Management.

LEGAL STUDIES

Students undertaking this unit will:

- examine their rights and obligations as young Australians at home, at school, in the workplace, and in society generally. They will investigate the origins of our legal system and how laws are made
- consider the impact of the Australian legal system on the customary laws of our indigenous people
- assess the role and impact of our legal system in relation to significant social issues, including those associated with the protection and maintenance of our natural environment
- examine the criminal justice system using case studies, guest speakers, and court visits
- discuss and critically analyse legal issues currently featured in the media.

Recommended as preparation for VCE Legal Studies.

MODERN HISTORY

Students undertaking this unit will study:

- geographic and historical events during the period beyond 1918 from an Australian and international perspective
- the culture, leaders, people, key events, ideologies, and social movements of countries in Asia including struggles for rights and freedoms. Students will develop geographic knowledge and skill as they investigate the connections between Asian nations in a globalising world
- geographic concepts, including environmental change and management, and geographies of human wellbeing
- individual conflicts, looking at the causes, events, outcomes, broader impacts, including Australia's involvement
- causes of conflict and how these can link to the role of government, particularly in relation to human rights.

Conflicts to be studied will include World War Two, the Vietnam and Korean Wars, East Timor, the Gulf Wars, and the War on Terrorism.

Recommended as preparation for VCE 20th Century History.

SOCIOLOGY

Students undertaking this unit will:

- answer the questions: *What is popular culture?* and *What is society?*
- be challenged to make comparisons with more conventional primary and secondary source materials instead of accepting music and film as representing truth without understanding reservation or objection
- develop an understanding of politics, human rights and environmental issues affecting Australians by critiquing film and music, and focusing on values and social structures as a means of raising community awareness.

Recommended as preparation for VCE Sociology and VCE 20th Century History.

PHYSICAL EDUCATION

Students undertaking this unit will:

- engage in a range of team and individual based sports such as Soccer, Basketball and Badminton
- work collaboratively on their skill performance, and their ability to understand sports from beyond the perspective of a player, coach, umpire, and organiser
- learn anatomy, biomechanics, and how to enhance performance.

This class consists of two practical sessions per week during which students will engage in team and individual sports. Students will study one laboratory session per week, learning how to observe and study sport, and one session per week of theory exploring how to facilitate competitions, different coaching styles, and much more.

Recommended as preparation for VCE Physical Education.

OUTDOOR EDUCATION

Students plan and participate in a range of outdoor activities and develop knowledge and skills for participating safely in these activities. Through this unit, students develop of a sense of place by instilling a deeper understanding and appreciation of the local natural environment in students. This unit is designed to extend students' knowledge of canoeing, bushwalking, navigation, and other outdoor pursuits.

Please note that expeditions and day trips are compulsory for this subject.

Students will:

- develop a greater understanding and appreciation of the outdoors with particular focus on developing personal skills in bushwalking, bushcraft, camping, recreational water activities and other outdoor pursuits
- participate in a range of outdoor expeditions with the emphasis on developing leadership skills, planning and preparation, including surfing, canoeing, and overnight hiking
- explore the concepts *minimal impact* and *leave no trace*, risk management, working in teams, co-operating, and working with others to reach a common goal
- develop skills needed for hiking, including meal planning, Trangia cooking, equipment, and specific gear requirements
- conduct research on coastal and river environments.

Recommended as preparation for VCE Outdoor Environmental Studies

GYM

This class will usually consist of two practical sessions per week during which students will engage in different types of fitness and two sessions per week of theory exploring the muscular and skeletal systems, and ways of enhancing performance.

Students undertaking this unit will:

- engage in training programs both inside and outside the gym
- work on improving a range of fitness components including speed, power, and flexibility
- learn about how fitness contributes to overall health and wellbeing
- understand the basics of human physiology, the importance of warmups and how to prevent injuries
- create fitness programs and measure fitness

Recommended as preparation for VCE Health and Human Development, Sport and Recreation and Physical Education.

AFL: GIRLS / BOYS

Students refine specialised movement skills in AFL, develop game sense and tactical awareness, and explore how participation in AFL contributes to personal, social, and community health. The unit includes physical performance, peer coaching, video analysis, and a research task.

Students undertaking this unit will:

- refine key AFL movement skills (e.g. kicking, handballing, marking).
- apply offensive and defensive strategies in gameplay.
- collaborate effectively in team situation, demonstrating leadership and communication.
- analyse how AFL participation supports physical, mental, and social wellbeing.
- reflect on the role of AFL in promoting community health and inclusion.

BASKETBALL

This elective is designed for students who have a strong interest in Basketball and want to develop both their practical skills and understanding of the game. The course consists of three sessions per week, including a combination of practical and theory-based learning. Practical lessons will involve skill development (dribbling, shooting), game play, and strength and conditioning tailored to Basketball performance, including a variety of training methods and pre-season style preparation. Students will also have the opportunity to compete in games, potentially against other local schools.

The theory component will explore a wide range of Basketball related topics such as player statistics, game and skill analysis, body systems, recovery strategies, nutrition, the history of Basketball, gender equality, and leadership in sport. Students may also participate in excursions, including touring clubs and facilities and attending live matches, providing real-world insight into the professional game. This subject is ideal for students who are passionate about Basketball and want to deepen their knowledge, improve their performance, and explore the sport beyond just playing.

HEALTH AND LEISURE

The Year 10 Health elective is designed to give students an excellent base of knowledge to prepare them for VCE Health and Human Development. This subject aims to build awareness of the factors impacting the health of Australians. There will be opportunities to explore the concept of human development through a range of tasks including the use of stimulator babies. Students will undertake in-depth investigations into health promotion in Australia. Students will have an opportunity to explore the concept of living an active lifestyle through a range of low impact physical leisure activities which may include darts, carpet bowls, frisbee golf, table tennis, nature walks, yoga, aerobics, bocce, badminton and croquet.

Students completing this unit will investigate:

- concepts of health and wellbeing
- human development
- targets of health promotion, including road safety, skin cancer and smoking.
- disadvantaged population groups
- Australia's healthcare system
- Influences on identity
- community services
- active lifestyles

Recommended as preparation for VCE Health and Human Development.

APPLIED SCIENCE

Applied Science "Eco Engineers" is a project-based subject where students design, test and refine solutions to real-world environmental challenges. It sits at the intersection of science, engineering and sustainability, less about memorising facts, more about building, testing and improving ideas.

Students will explore how science can be used to shape the future, tackling issues such as food security, energy efficiency and sustainable transport. Along the way, they will develop practical problem-solving skills and learn how to think like an engineer, iterating, testing, failing, and improving.

Students will:

- Investigate real-world challenges such as food production, transport systems and energy use through project-based learning
- Design, build and test models or prototypes to solve practical problems
- Conduct experiments to evaluate how well their designs work and refine them based on evidence
- Apply the engineering design process to develop and improve solutions
- Compare and evaluate different design ideas, considering efficiency, cost and environmental impact
- Explore how science and engineering connect to current and future careers

Applied Science supports pathways into VCE Environmental Science, Physics, Systems Engineering and other STEM-based subjects. It also builds transferable skills for careers in engineering, environmental management, design, and emerging sustainability industries.

BIOLOGY

Students develop an understanding of evolution by natural selection and the development of scientific ideas over time. They explore the diversity of life on Earth as a result of evolutionary processes, shaped by genetic variation and environmental pressures across geological timescales.

Students will:

- Develop and use models and diagrams to explain the relationship between DNA, genes and chromosomes, and how genetic information is inherited
- Describe how the processes of sexual and asexual reproduction enable survival of the species.
- Investigate and analyse patterns of inheritance for simple traits across generations
- Explain the processes underpinning natural selection, including variation, selection pressures and differential survival
- Evaluate and interpret a range of evidence supporting the theory of evolution, including fossil, genetic and comparative data
- Examine geological time and consider how changes over long timescales have influenced the evolution and diversity of living organisms

Recommended as preparation for VCE Biology.

CHEMISTRY

Year 10 Chemistry introduces students to the fundamental ideas that explain how substances are structured, interact, and change in the world around them. Building on knowledge from Year 9 Core Science, students develop a deeper understanding of chemical reactions, representation, and the underlying principles that govern matter. The course also introduces key foundational concepts that prepare students for further study in senior science, including VCE Chemistry.

Students will:

- Write and balance chemical equations, applying the Law of Conservation of Mass
- Identify and classify different types of chemical reactions, including synthesis, neutralisation, decomposition, single and double displacement, precipitation and combustion reactions
- Investigate factors that influence reaction rates, such as temperature, concentration, surface area, and the presence of catalysts
- Represent chemical reactions using word equations, balanced formula equations, and particle models
- Develop skills in naming and writing chemical formulas for compounds using IUPAC conventions
- Compare and model different types of chemical bonding, including ionic, covalent, and metallic bonding
- Use models and diagrams to represent how atoms bond and form substances

Recommended as preparation for VCE Chemistry.

ENVIRONMENTAL SCIENCE

Environmental science explores how earth's systems are connected and how human activities impact these systems. Students will investigate how disruptions to natural cycles, such as the carbon cycle, affect the environment, and consider practical and innovative solutions to current climate challenges.

Through a mix of theory and hands on investigations, students will build an understanding of how living and non-living components interact within ecosystems and across the planet.

In this subject, students will:

- Investigate how living organisms depend on coordinated and interconnected systems to survive and respond to environmental change
- Explore relationships within ecosystems, including predator–prey interactions and the effects of events such as bushfires, droughts and floods
- Examine global systems, with a focus on the carbon cycle and the interactions between the biosphere, lithosphere, hydrosphere and atmosphere
- Analyse how scientific models and theories (such as climate change) develop over time and why they are revised
- Develop and test their own questions and hypotheses through practical investigations and data collection
- Build skills in analysing and communicating scientific findings

This subject is recommended as preparation for VCE Environmental Science.

PSYCHOLOGY

Students undertaking this unit will explore an introduction to psychological foundations of human behaviour as a semester elective. They will develop an understanding of how thoughts, feelings and actions are influenced by the brain, how individuals interpret the world around them and what shapes human perception and behaviour.

Students will:

- Examine how the nervous and hormonal systems coordinate to ensure survival in everyday life and during stressful events
- Investigate sleep, including why we sleep, how sleep cycles operate, and the effects of sleep deprivation on functioning
- Understand the structure of the brain, including the functions of the four lobes, and explore the impact of brain injuries resulting from sport, trauma or medical procedures
- Explore how we perceive the world by analysing visual inputs and applying this knowledge to scientific investigations

Recommended as preparation for preparation for VCE Psychology.

PHYSICS

Students will develop their understanding of energy conservation by exploring key principles and conducting investigations related to force, mass, and acceleration in moving objects. Learning will connect concepts to both everyday experiences and applications in space, supporting students to explain and predict physical phenomena using scientific models and laws.

Students will:

- Explain the principle of energy conservation by analysing how energy is transferred and transformed in real-world contexts, including collisions and everyday interactions
- Apply Newton's Laws of Motion to describe and predict motion, using relationships between force, mass, and acceleration
- Plan and conduct practical investigations into motion, forces, and energy, including collecting, analysing, and representing data using graphs and models
- Explore different types of forces and their effects on objects, alongside the study of magnetism and its role in generating and interacting with electricity
- Investigate the generation and transmission of electricity, including constructing and analysing simple circuits
- Sequence key events in the evolution of the universe and evaluate evidence supporting theories such as the Big Bang Theory

Recommended as preparation for preparation for VCE Physics.

DESIGNING AND DEVELOPING GAMES

Students undertaking this unit will:

- focus on acquiring software skills to develop interactive games and produce a variety of simple computer games
- work individually and in teams to discuss and plan the flow of games
- research and evaluate why and how interactive games appeal to users
- analyse and evaluate the effectiveness of their games, and reflect on the changes that could be made to meet the expectations of users
- use different software programs currently used to create current AAA games that can be accessed through a range of different platforms, including the Unreal Engine and Unity.
- learn how to create visual elements for their games, including the development of their main characters, colours, and backgrounds
- develop skills in different languages used for coding such as C++, C#, and other commonly used computer languages.

Recommended as preparation for VET Information Digital Technology.

DIY COMPUTER SYSTEMS

Students undertaking this unit will:

- study different computer systems and learn the various components of a computer and networked system
- examine various components of a computer and understand how the components fit together
- disassemble and reassemble computers and fix faulty computer systems
- research components for purchase on the online market and put together a list of the components required to build a gaming computer
- purchase all the components in their list and build the computer from scratch, requiring the installation of operating systems and software, and the use of bench-testing to make sure their system runs at optimum performance
- market their computer for sale, creating all relevant advertising for listing.

Recommended as preparation for VET Information Digital Technology.

AUTOMOTIVE: INDUSTRIAL TECHNOLOGY

Students undertaking this unit will:

- investigate automotive systems including fuel, electrical, cooling, braking, exhaust, suspension and drivetrain systems
- complete design briefs related to automotive fault diagnosis and maintenance procedures
- work individually and in teams to develop skills in the use of appropriate tools and equipment
- use workshop manuals and technical documentation to complete maintenance and repair procedures
- diagnose automotive faults using industry-standard testing and measurement equipment
- disassemble, inspect, and rebuild two-stroke and four-stroke engines
- investigate environmental and sustainability considerations related to fuel use, emissions, and vehicle maintenance

Recommended in preparation for Certificate II Automotive.

SCALE MOTORSPORTS

The Scale Motorsports Program gives students a hands-on opportunity to explore real-world engineering systems through the design, tuning and testing of 1/8 scale nitro and electric radio control (RC) vehicles. It supports the core aims of Design and Technology by promoting problem-solving, prototyping, data analysis, design and racing.

Through guided projects and independent design tasks, students will:

- Learn how to assemble, repair and maintain RC vehicles.
- Develop a working knowledge of engines, electronics and mechanical systems.
- Optimise performance by analysing and adjusting vehicle systems.
- Understand the role of suspension geometry, gearing and materials in vehicle performance.
- Diagnose issues and develop practical, innovative solutions.
- Change tyres and setup for specific track conditions and performance goals.
- Learn how to take corners efficiently, manage throttle control and navigate jumps.
- Record and interpret lap times, handling feedback and wear data.
- Use results to evaluate and improve setup decisions.
- Collaborate in roles such as driver, mechanic and analyst during races.
- Explore links to careers in product design, motorsport, engineering and industrial technologies.
- Build transferable skills relevant to VET and STEM pathways.

Recommended in preparation for Certificate II Automotive.

WOOD DESIGN

Students will design and construct different articles of furniture using complex processes, including tables, cabinets or other pieces of household furniture.

Students will:

- design and construct products made from wood using complex woodworking processes
- develop an understanding of the correct handling and safe use of hand and power tools
- evaluate their work using appropriate conventions and share their completed findings
- undertake design exercises and explore multiple options to solve complex and non-complex problems
- undertake investigations into the appropriate use of materials to solve set problems.

Recommended as preparation for VCE Design and Technology or Certificate II Building and Construction.

METAL DESIGN

Students undertaking this unit will:

- be introduced to oxy cutting, arc welding and basic metal fabrication techniques
- design and produce several projects
- communicate achievements and design options through various techniques
- investigate materials and equipment and complete other tasks related to metal working industries.

Recommended as preparation for VCE Design and Technology or Certificate II VET Engineering.

SYSTEM DESIGN AND ROBOTICS

Students undertaking this unit will:

- develop skills in the use of appropriate tools, equipment, and techniques to build and test simple electromechanical devices
- apply the design process to develop practical solutions to real-world problems
- create ideas for projects from a range of media and levels of description
- evaluate alternative design ideas and select solutions based on criteria and constraints
- generate, communicate, and refine design ideas using appropriate technical terminology
- develop design folios to document design thinking, planning, testing, and evaluation
- design, build, and test functional electronic and electro-mechanical systems using a range of materials and technologies
- test and evaluate projects based on appropriate standards
- communicate project outcomes and evaluations using technical terminology

Recommended as preparation for VCE Systems Engineering or Certificate II Electrotechnology.

MODERN FOOD PRACTICES

Modern Food practices is a comprehensive and engaging course that explores food safety, sensory analysis, food science, product development, global food cultures, equity, and industry trends. Students develop both practical and theoretical knowledge with 5 sessions a week.

Students will undertake the following:

- Learn and apply **food safety and hygiene practices**, including preventing foodborne illnesses and understanding food contamination types.
- Explore **the sensory properties** of food through hands-on taste testing, comparing store-bought versus homemade products, and evaluating their quality.
- Investigate various **cooking methods** (dry and wet) and the scientific principles behind them, including reactions such as caramelisation, gelatinisation, and aeration.
- Study **food preservation techniques**, including both traditional Aboriginal methods (e.g., curing meats) and modern methods like freezing, pasteurisation, and vacuum sealing.
- Examine **emerging food technologies and innovations**, such as 3D food printing, sustainable food production, and new packaging methods.
- Explore different roles in the food service and catering industries, from kitchen staff to front-of-house, and discuss the industry's social, cultural, and economic impact.
- Examine **global food equity**, including the causes of food insecurity, the role of aid agencies, and the consequences of malnutrition.
- Study **current food trends**, sustainability practices, and the impact of media and celebrity chefs on food choices and presentation. As well as the influence of migration and multiculturalism on Australian food habits and examine Indigenous food practices and food security issues.
- Complete **Common Assessment tasks,** including the *Creating a new food product* and the *Food Truck,* where students will use the design process to meet the requirements.

Recommended as preparation for VCE Food Studies and Health and Human Development.

FOOD FOR YOU

Food For You is a comprehensive subject designed to develop students' understanding of nutrition across the stages of life, food safety, and the role of food in health and wellbeing. Students will undertake the following:

- Develop an understanding of **safe food handling and hygiene practices**, including the prevention of foodborne illness and contamination.
- Investigate the **Australian Guide to Healthy Eating** and the six essential nutrient groups, with a focus on their functions and the role they play in maintaining a healthy body.
- Explore a wide range of **factors that influence food choices**, such as culture, religion, health, media, technology, and socioeconomic background.
- Examine **special dietary needs and health conditions**, including allergies, intolerances, obesity, diabetes, and eating disorders.
- Analyse **ethical food choices and sustainability**, including issues surrounding animal welfare and food production systems.
- Study **nutrition across the lifespan**, with a focus on the changing dietary needs from infancy through to older adulthood.
- Learn how to interpret and create **food labels and packaging**, gaining skills to make informed decisions as food consumers.
- Complete **Common Assessment Tasks**, including the *Happy Gut* and *Meals on Wheels* projects, where students research, plan, and prepare meals to meet specific health and nutritional requirements.

This subject runs over five sessions per week, including practical cooking classes where students apply their learning in a hands-on environment. It offers a balance of theory and practice, equipping students with lifelong skills to make healthy, informed, and ethical food choices.

Recommended as preparation for VCE Food Studies and Health and Human Development.

NATIVE BLACK SWAN

Malgobila

CAMPUS

YEAR 11 AND 12

The Victorian Certificate of Education (VCE) operates in all Victorian Secondary Schools. All Year 11 and 12 VCE subjects and studies are prescribed by the Victorian Curriculum and Assessment Authority (VCAA).

Selection of Courses and Procedures in Year 11 and Year 12

VCE is usually completed over two years. At Years 11 and 12 subjects or studies are studied as semester long units.

At Year 11 subjects are studied as Units 1 and 2. At Year 12, subjects are studied as sequenced Units 3 and 4. Students cannot study Unit 4 before studying Unit 3. Some Year 11 students may take a Unit 3 and 4 sequence while in Year 11.

Class Attendance at Years 11 and 12

Students should strive for 100% attendance in VCE.

In accordance with VCAA rules, the College's policy on attendance of Years 11 and 12 students states that if a student's attendance falls below 90%, they may receive an 'N' for that unit. This may affect the completion of their VCE. Extenuating circumstances will be considered.

Compulsory Requirements

All students entering Year 11 are to take 10 Units of Study throughout the course of the year - 5 units in each semester. Students at Bairnsdale Secondary College must take Units 1 and 2 of VCE English in Year 11.

All students in Year 12 should take *5 sequences* of Units 3 and 4. It is not possible to change courses mid-year in Year 12. Students who have completed a Unit 3 and 4 sequence in Year 11 may seek to do *4 sequences* of Unit 3 and 4 in Year 12, but this must be approved by the VCE Coordinator.

VCE students can access VET studies as part of their VCE program.

Study Sessions

All students who have *study sessions* must report to the Malgobila LRC to be marked present on the study roll.

VCAA Regulations for the Satisfactory Completion of VCE

The VCE is a single certificate normally completed over two years. To be eligible for the VCE, students are required to satisfactorily complete a minimum of sixteen units of study, including:

- 3 units of English including English Units 3 and 4, plus at least three sequences of Units 3 and 4 studies other than English.
- VCE VET programs contribute to a Unit 1-4 sequence in their own right for completion of the VCE. Some VCE VET programs now have a scored assessment. This means a student's scored SACs and exams contribute to their ATAR score.

For satisfactory completion of a unit, students must demonstrate achievement of the Learning Outcomes for each study attempted. S or N, (Satisfactory or Not satisfactory), is based on the teacher's judgement of a student's overall performance on coursework and assessment tasks designated for their units and based on the key knowledge and key skills referred to in the VCAA Study Designs.

Achievement of an outcome means:

- the work meets the required standard as described in the Outcomes (Study Design)
- the work was submitted on time
- the work is clearly the student's own
- there has been no substantive breach of rules, including school attendance rules.

If a student fails to successfully demonstrate a Learning Outcome, they will be given the opportunity to redeem. The process for redemption of Learning Outcomes is detailed in the *BSC VCE / VCE VM Delivery and Assessment Policy*.

ATAR Attainment

Students completing the VCE achieve an ATAR rank at the completion of their final year of studies in year 12. This ATAR rank allows them to apply directly to University and other training organisations as a school leaver. The ATAR is a ranking of Year 12 results that measures a student's overall academic achievement compared with other final year students in Australia. The ATAR is not a score out of 100 - it is a rank. The ATAR is calculated by VTAC based on up to six VCE scaled study scores. The ATAR is calculated from an aggregate, produced by adding together:

- the highest scaled study score in English studies
- the highest scaled study scores for three additional permissible studies, plus
- 10% of the scaled study scores for the fifth and sixth permissible studies.

NOTE: As the English 3 and 4 is a compulsory component of the ATAR score, it is vital students gain an S for both English Units 3 and 4.

Choosing Units

There are many recommendations that students must consider before they select their Year 11 or 12 Course. It is strongly encouraged to make subject selections with the support of a member of the pathways team in the Senior hub. Some considerations include:

- Most units are designed to be sequential – Unit 1 is followed by Unit 2.
- To maximise achievement, most subjects recommend that Units 1, 2, 3 and 4 are sequential (1 followed by 2, then 3 and 4).

Availability Of Units

All units offered have been developed by the College's Key Learning Areas and endorsed by the Curriculum Committee. Unit selection is based on:

- student choice
- staffing availability
- student numbers
- pathway options for further training/education.

Timetables are compiled based on historic student subject choices. Additional units may be offered if there are sufficient students, staffing and resources available. New units will not be introduced based solely on student request.

Students should make wise and informed decisions when selecting units. Students should choose subjects that they:

- are good at
- are interested in
- require as prerequisites for tertiary study
- have a vocational interest in.

What is VCE VM?

The Victorian Certificate of Education Vocational Major (VCE VM) is a 2-year vocational and applied learning program within the VCE. The program aims to equip students with the skills, knowledge, confidence, and agency needed to prepare for the world of work and further education and training.

A primary purpose of the VCE VM is to empower students to make informed decisions about the next stages of their lives through real life workplace experiences, providing them with the best opportunity to achieve their personal goals and aspirations in a rapidly changing world. Students can network with potential employers and/or experience working in an industry to support choices about future apprenticeships or traineeships.

Vocational and Applied Learning pathways not only equip young people for entry into the world of work but also provide them with functional competencies and skills (including soft skills like effective communication, interpersonal skills, and self-management) that are needed to participate in the economy and society.

As a requirement of the VCE VM students complete a work placement and enrol in a VET course.

Students studying the VCE VM do not generate an ATAR.

How does VCE VM run at Bairnsdale Secondary College?

To be awarded the VCE Vocational Major, students must satisfactorily complete the mandatory minimum 16 units. Students who meet the requirements will receive the appellation of 'Vocational Major' on their VCE certificate.

Units will include Personal Development Skills, Work Related Skills, Numeracy and Literacy aiming to equip students with the necessary skills and knowledge to engender confidence and self-agency in their preparation for the world of work and further training and education.

The Vocational Major units have a strong focus on the application of knowledge and skills in practical contexts. Many of the units are underpinned by community-based activities and the development of self-agency.

VET is Essential in VCE VM But Optional for VCE Students

Vocational Education and Training (VET) Programs assist students to make the transition to further education, training, and employment. Many programs are based on entry level TAFE courses. These programs are designed so that students can develop general work-related competencies, and the skills and knowledge required in a particular industry. All VCE and VCE VM students may choose from both internal or external VET subjects.

VET Programs

VET programs provide the following benefits to students, including:

- gaining the VCE/VCE VM and a VET qualification
- developing an awareness of the world of work through work placement
- developing general work-related competencies (including skills in communication, teamwork, using technology, problem solving, using mathematical ideas and concepts, planning, and organising team activities, gathering and analysing information, and occupational health and safety)
- developing of skills and knowledge required to work in a particular industry
- gaining a competitive edge in looking for both casual and full-time employment.

Student Commitment

While there are many advantages for students who choose a VET program, Bairnsdale Secondary College is committed to ensuring that students gain entry to and are successful in the VET programs of their choice. Students need to be committed to their VET program. They will be expected to:

- meet application deadlines, prepare for, and attend interviews on time
- attend classes on time and on a regular basis (BSC senior student 90% attendance policy applies)
- notify the school, TAFE, or other registered training organisation of an impending absence
- always act in a responsible manner at school, TAFE, registered training organisation, or workplace
- abide by the rules of TAFE or the other registered training organisation
- always be prepared for classes and have the necessary equipment
- organise and complete work placement when required
- promptly notify Bairnsdale Secondary College's VET Coordinator whenever problems or queries arise.

Work Placement

Some VET programs have a compulsory work placement component and others do not. Courses with work placement components require students to undertake structured work placement in their chosen industry.

The hours and timings of work placement for each program varies. If students completing a VET program while doing VCE, they should schedule work placements during the school holidays. Family holidays should be organised around work placements. Students completing a VET program will be allocated one day a week to complete their work placement.

Students will be expected to assist with the organisation of their work placement. They are required to get legal forms signed and, in some cases, attend an interview with prospective employers.

Exceptional circumstances can occasionally arise for students completing their VCE or VCE VM. These circumstances may be considered to allow for an extension or delay of decision for completion of a unit, School Assessed Coursework (SAC), or School Assessed Task (SAT). Approval will be granted by the VCE Coordinator in consultation with the senior school Principal.

Exceptional circumstances may include:

- that after a serious illness, covered by a doctor's certificate, work missed could be completed, if time is available within the VCAA submission dates
- extreme family dislocations, bereavements or upheavals supported by a professional's certificate.

Note that: Work missed because of extended holidays or prolonged illness may not be eligible for time extensions and the unit will usually have to be repeated for successful completion.

Please refer to the *BSC VCE / VCE VM Delivery and Assessment Policy.*

Victorian Pathways Certificate

The College is committed to ensuring all students have a pathway to success. The Victorian Pathways Certificate (VPC) provides an enriched curriculum and excellent support for students to focus on developing the skills, knowledge, and qualities for success in personal, workplace, and civic life.

The VPC is termed an accredited 'foundation secondary qualification' under the Education and Training Reform Act 2006.
Students at Bairnsdale Secondary College who are enrolled in the Victorian Pathways Certificate can pursue completion of the certificate or use it as a jumping off point to other learning programs, employment or further study.

VPC enrolment may be suitable for a student who:

- has had a highly modified program during their F-10 years
- is re-engaging into the school environment
- has had a transient experience with previous school enrolments
- meets the eligibility for the **Program for Students with Disabilities (PSD)** / **Disability Inclusion Profile**
- receives support from the top three levels of the Nationally Consistent Collection of Data (NCCD): extensive, substantial and supplementary)
- has additional or complex social and wellbeing needs that cannot be supported in the VCE or VCE VM through Special Provision supports.

Enrolment in the Victorian Pathways Certificate is to be conducted under the guidance of senior hub pathways team.

AUTHENTICATION OF WORK

Teachers are required to authenticate learning tasks, including all Common Assessment Tasks (CATs), School Assessed Coursework (SACs) and School Assessed Tasks (SATs). Teachers are required to ensure the work submitted for assessment by students is genuinely their own. For authentication of their work, students must ensure that:

- all unacknowledged work submitted for Learning Outcomes and School Assessed Coursework (SACs and CATs) must be genuinely their own work. For VCE studies a great deal of coursework will be conducted in class under teacher supervision
- all resources, including print texts, electronic texts or human resources providing assistance, should be acknowledged in accordance with acceptable referencing procedures, and
- they periodically produce evidence of the development of their learning outcome assessment tasks, including draft developments.

Teachers should monitor the progress and development of students' work, so they can attest that the work is the student's own.

Students should not submit the same piece of work for more than one Learning Outcome or School Assessed Task.

Students should not accept undue assistance from any other person in the preparation and submission of work. Undue assistance includes providing actual adjustments or improvements to the student's work or dictating or directing a student to insert particular text. However, students may be given advice about the general nature of adjustments or improvements to their work.

Assessment Tasks may be called in for auditing purposes.

The VCAA will also undertake statistical analysis comparing students' School Assessed Coursework with their GAT results to identify students with unexpectedly high results in their School Assessed Coursework. Anomalies are reported to the school for investigation.

When students use computers to produce SACs/CATs, it is the student's responsibility to ensure that:

- an alternative system is available in case of computer malfunction or unavailability
- hard copies are produced regularly to meet authentication and drafting requirements *and*
- back-up copies are made.

A computer failure resulting in lost work is not authentic justification for extension.

If a teacher believes that a student has submitted work which is not his or her own, or that a student is in breach of other rules relating to school assessment set by the College, the teacher will investigate the matter and report it to the VCE Coordinator, who will then conduct further enquiries as deemed necessary. The VCE Coordinator will act in an advisory capacity to the senior school Principal, who is responsible for determining what action would be taken.

For more information see:

- http://www.vcaa.vic.edu.au/
- the *BSC VCE / VCE VM Delivery and Assessment Policy.*

Learning Outcomes: School Assessed Coursework (SACs) and School Assessed Tasks (SATs)

When a breach of authentication is confirmed, the Principal has the power to:

- reprimand a student, OR
- give the student the opportunity to resubmit work if this can occur within the dates designated by the VCAA, OR
- refuse to accept that part of the work which infringes the rules and base a decision as to whether to award the work requirement an N or an S upon the remainder of the work, OR
- refuse to accept any of the work if the infringement is judged by the Principal to merit such a decision, in which case an N will be awarded for the work requirement.

Where work was initially accepted and assessed and a breach of authentication has been discovered, the Principal shall determine which of the above penalties shall be imposed. This may result in a change of the original result from an S to an N.

If an N is awarded for a Learning Outcome, consequently an N will be awarded for the related unit.

Schools may seek advice from the VCAA Secretary about imposing an appropriate penalty. Students have the right of appeal to the VCAA against penalties imposed for breaches of authentication.

Notification to the Student

If a decision is made to impose a penalty the Principal must notify the student in writing within 14 days of the decision. This notification must include:

- the nature of the Breach of Rules by the student
- the reasons for a decision being made that a Breach of Rules has occurred and the evidence supporting this
- the penalty to be imposed
- advice about the student's right to appeal to the VCAA, and advice that this appeal must be lodged within 14 days of receipt of notification from the Principal.

Notification to the VCAA

Principals are required to report to the VCAA all occurrences of breaches of authentication.

Student Appeal

Students have the right of appeal to the VCAA against penalties imposed for breaches of authentication in relation to work requirements and school assessed SACs or SATs.

NOTE: Regular attendance and academic success are closely related. The College expects 100% attendance unless special circumstances apply.

KLA AREA	SUBJECT
THE ARTS	Art Creative Practice
	Art Making and Exhibiting
	Theatre Studies
	Visual Communication Design
ENGLISH	English/EAL
HUMANITIES	Economics
	Business Management
	History
	Legal Studies
	Sociology
MATHS	General Mathematics
	Mathematical Methods
	Specialist Mathematics Units 3 and 4
HEALTH AND PHYSICAL EDUCATION	Health and Human Development
	Physical Education
	Outdoor and Environmental Studies
SCIENCE	Biology
	Chemistry
	Environmental Science
	Physics
	Psychology
TECHNOLOGY	Food Studies
	Product Design and Technology
	Systems Engineering

KLA AREA	SUBJECT
VCE Vocational Major (VM)	Literacy
	Numeracy
	Work Related Skills
	Personal Development Skills

KLA AREA	SUBJECT
VET	Certificate II Agriculture
	Certificate II Animal Care
	Certificate II Automotive
	Certificate II Building and Construction (Carpentry)
	Certificate III Business (online)
	Certificate II Civil Construction
	Certificate II Community Services
	Certificate II Cookery (On Campus)
	Certificate III Early Childhood Education and Care
	Certificate II Electrotechnology (Career Start)
	Certificate II Engineering Studies (Metal Fabrication)
	Certificate II Hair and Beauty Skills Set
	Certificate III Health Services Assistant
	Certificate II Horticulture
	Certificate III Information Technology (On Campus)
	Certificate II Plumbing
	Certificate II and III Sport and Recreation (On Campus)
	Certificate II Workplace Skills (online)

SUBJECT SELECTION

Students and their families will have an opportunity to select subjects with the support of a member of the Senior pathways hub team during an interview at the College. Students are encouraged to discuss subjects and senior pathways with their families and teachers in preparation for subject selection.

In selecting subjects, one subject must be selected from each of the pre allocated lines. Any accelerated subjects or VET units will be selected during the subject selection process.

Year 11 2027

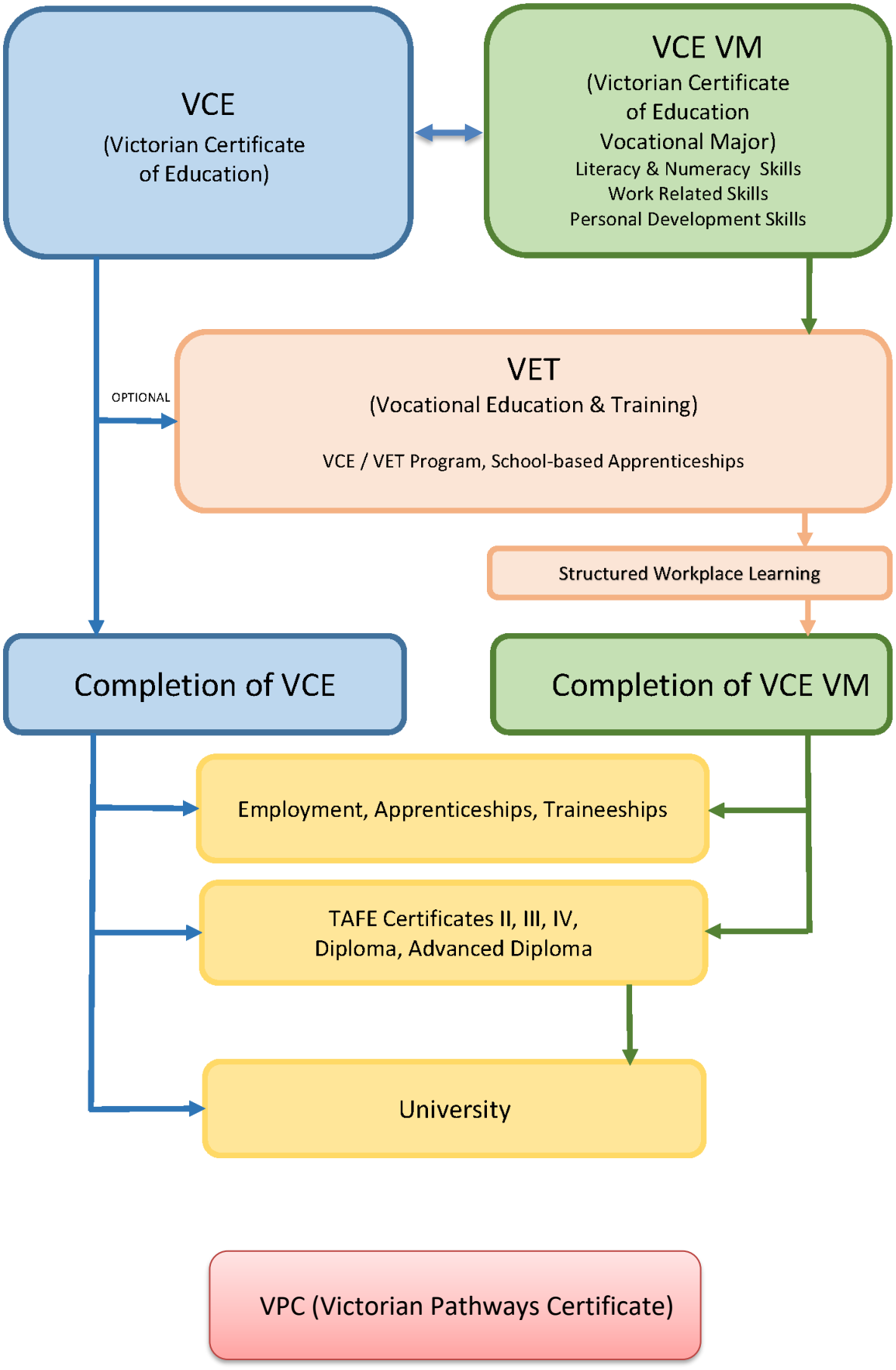
Year 11				
1	**2**	**3**	**4**	**5**
English	English	Physical Education	English	General Maths
Literacy	Literacy	Food Studies	Literacy	Legal Studies
Numeracy	Numeracy	General Maths	Chemistry	Art Making and Exhibiting
General Maths	Physics	Business Management	Physical Education	Biology
Maths Methods	Product Design and Technology	Art Creative Practice	Sociology	Outdoor and Environmental Studies
Health and Human Development	Modern History	Work Related Skills / Personal Development Skills	Psychology	Work Related Skills
Visual Communication Design	Environmental Science	Systems Engineering	VET Information Technology	English
	Economics	English	VET Cookery	
			VET Sport and Recreation	
			Theatre Studies	

Year 12 2027

Year 12				
1	**2**	**3**	**4**	**5**
English	English	English	Theatre Studies	Art Making and Exhibiting
Business Management	Food Studies	Art Creative Practice	Chemistry	General Maths
Physical Education	Physics	Biology	General Maths	Legal Studies
Literacy	Sociology	Systems Engineering	Health and Human Development	Maths Methods
Numeracy	Product Design and Technology	Work Related Skills / Personal Development Skills	VET Information Technology	Outdoor and Environmental Studies
	Numeracy	Psychology	VET Cookery	
	Literacy		VET Sport and Recreation	

*External VET subjects may be incorporated into the timetable

LEARNING PATHWAYS



THE ARTS

ART CREATIVE PRACTICE UNITS 1/2

OVERVIEW

VCE Art Creative Practice allows students to create and express their ideas through any art form or style. Any media and materials can be used in painting, drawing, sculpture, printmaking, photography, digital, etc. In the practice of Making and Responding, students develop their skills in critical and creative thinking, innovation, problem-solving and risk-taking. By combining a focused study of artworks, art practice and practical art making, students recognise the interplay between research, art practice and the analysis and interpretation of art works.

The Creative Practice is comprised of four components that are based on art practice and Experiential, Inquiry and Project-based learning. These components are:

- research and exploration
- experimentation and development
- refinement and resolution
- reflection and evaluation.

Structure:
The study is made up of four units.

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

AREAS OF STUDY

UNIT 1 - Interpreting artworks and exploring the Creative Practice

Students learn about the components of the Creative Practice and explore areas of personal interest to develop a series of visual responses. They use a range of materials, techniques, processes, and art forms to create a body of experimental work in response to their research of the practices of artists and their personal observations of artworks.

They focus on the making of art and examine how artists communicate ideas and meaning in artworks. They examine artists in different societies, cultures and historical periods and develop their own interpretations and viewpoints about the meanings and messages of artworks.

U*NIT 2 - Interpreting artworks and developing the Creative Practice*

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

POSSIBLE FUTURE PATHWAYS

There are folio building skills and terminology covered in Units 1 and 2 Art Creative Practice that can also be used in Units 3 and 4 Art Making and Exhibiting.

Art Creative Practice develops creative thinking and problem-solving skills that are transferable into many different pathways for students.

Areas of study which Art Creative Practice leads to.

- visual arts courses
- design courses
- fine art courses.

Studying this subject may lead to the following creative based careers: Art critic, Arts educator, Art therapist, Artist, Gallery curator, Computer Animator, Photographer, Designer, / Illustrator.

ART CREATIVE PRACTICE UNITS 3/4

OVERVIEW

Units 3 and 4 Art Creative Practice is a continuation of skills built in Units 1 and 2. Students use the Creative Practice to create finished artworks and develop unique and personal ways of expressing their opinions and interests through creating and responding to artworks. Students may work in any art form or style.

AREAS OF STUDY

UNIT 3: Investigation. Ideas and the Creative Practice

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

UNIT 4: Interpreting, resolving, and presenting artworks and the Creative Practice

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

POSSIBLE FUTURE PATHWAYS

Many tertiary Art and Design courses use an interview process for admission into courses and require a folio.

Art Creative Practice develops creative thinking skills that are transferable into many different pathways for students including:

- visual arts courses
- fine art courses
- design.

Studying this subject may lead to the following creative based careers: art critic, arts educator, art therapist, artist, gallery curator, computer animator, photographer, story board artist, film maker, designer, and illustrator.

ART MAKING AND EXHIBITING UNITS 1/2

OVERVIEW

Throughout Unit 1 and 2 students experiment with a range of techniques and approaches, developing skills that foster curiosity and creative thinking and inspire new working practices. They respond to themes, progressively developing their own ideas and consolidating these ideas to plan and make finished artworks. Students' research, exploration and experimentation is documented in both visual and written form in a Visual Arts journal.

AREAS OF STUDY

Unit 1 - Explore: Materials, Techniques and Artforms

Students are introduced to different techniques and ways of trialling them and document this development of artmaking in their Visual Arts journal.

Expand: Make, Present, Reflect

Students are guided through the development and making of individual artworks based on a set theme. Students use the knowledge they have from their experimentation with materials in Area of Study 1 to make decisions about how they will present at least one finished artwork. Students will write a reflection statement about their experiences and the learning involved.

Investigate: Research and Present

Students investigate the artworks of Australian artists from different contexts and the materials, techniques, and processes they use to make artworks. Students will present their research alongside examples of the artist's work in a format appropriate for a proposed exhibition such as a brochure or catalogue.

Unit 2 - Understand: Ideas, Artworks, Exhibition

Students begin to understand how exhibitions are planned and the roles associated with the preparation and presentation of artworks for display.

Develop: Theme, Aesthetic Qualities and Style

Students are introduced to the use of art elements and art principles in art making and how they contribute to the aesthetic qualities in an artwork. They trial materials and techniques and develop ideas around a theme.

Resolve: Ideas, Subject Matter and Style

Students expand on their experiments with materials and their understanding of techniques and processes explored in Area of Study 2. Students refine their initial trials to create at least one finished artwork.

POSSIBLE FUTURE PATHWAYS

Units 1 and 2 leads onto Art Making and Exhibiting Units 3 and 4. There are folio building skills and terminology covered in Units 1 and 2 that can also be used in Units 3 and 4 Creative Practice, and Units 3 and 4 Visual Communication.

VCE Art Making and Exhibiting develops creative thinking and problem-solving skills that are transferable into many different pathways for students. Learning through, about and in the visual arts develops students critical thinking skills and their ability to interpret the worlds they live in.

VCE Art Making and Exhibiting provides students with opportunities to recognise their potential as artists, encourages self- expression and creativity, and can build confidence and a sense of individual identity.

The study of Art Making and Exhibiting leads to:

- visual arts courses
- design courses
- fine arts courses.

Studying this subject may lead to the following creative based careers: photographer, web design, interior design, fashion design, jeweller, milliner, artist, florist, landscape design, architect, set design, costume design, body artist, sign writing, art education, computer animation, illustration animation, illustration.

ART MAKING AND EXHIBITING 3/4

OVERVIEW

Students collect research material from various influences and inspirations. They explore and refine their use of materials, techniques, and processes to make finished artworks.

Student's document and record the development of their skills and justify and evaluate their thought processes.

Visiting and viewing exhibitions and displays of artwork is a part of this study. It helps students understand how artworks are displayed, and exhibitions are curated. It also has an influence on the student's own practice and encourages them to broaden and develop their own ideas and thinking around their own art making.

AREAS OF STUDY

Unit 3 - Collect: Inspirations, Influences, and Images

Students collect a variety of inspiration (including three practicing artists) from a range of sources to inform their experimentation and exploration of subject matter, ideas, and technical skills. Students record the documentation of these artists in their Visual Arts journal to demonstrate the connection to the artworks they develop.

Extend: Make, Critique and Reflect

Students make artworks that are developed from the experimentation and investigation from Area of Study 1. Students manipulate materials and apply techniques and processes to develop an individual style in their artworks. Students present their work for critique by their peers to reflect on their artmaking.

Connect: Curate, Design and Propose

Students investigate how curators plan exhibitions and prepare and display artworks. They use this knowledge to plan an exhibition of artworks from the artists they researched in Area of Study 1.

Unit 4 - Consolidate: Refine and Resolve

Students refine and resolve at least one finished artwork based on the ideas explored in Unit 3. Students document the materials, techniques and processes used.

Present: Plan and Critique

Students present and critique their finished artworks. They plan the presentation of their finished artwork for a specific exhibition space they have visited during Unit 4.

Conserve: Present and Care

Students examine a variety of exhibitions and review the methods used and considerations involved in the presentation, conservation, and care of artworks.

POSSIBLE FUTURE PATHWAYS

Many tertiary Art courses use an interview process for admission into courses and require a folio.

VCE Art Making and Exhibiting develops creative thinking and problem-solving skills that are transferable into many different pathways for students. Learning through, about and in the visual arts develops students critical thinking skills and their ability to interpret the worlds they live in.

VCE Art Making and Exhibiting provides students with opportunities to recognise their potential as artists, encourages self- expression and creativity, and can build confidence and a sense of individual identity.

The study of Art Making and Exhibiting leads to:

- visual arts courses
- design courses
- fine art courses.

Studying this subject may lead to the following creative based careers: photographer, web design, interior design, fashion design, jeweller, milliner, artist, florist, landscape design, architect, set design, costume design, Boyd artist, sign writing, art education, computer animation, illustration.

THEATRE STUDIES UNITS 1/2

OVERVIEW

In VCE Theatre Studies, students learn about the roles and processes of making and presenting theatre. In each unit, students explore a variety of styles, as well as learning about the history and world context that led to the rise of these styles.

Students are offered the opportunity to choose from the following roles in units 1-4: directing, acting and or design roles such as lighting, sound, costume, hair and make-up, props and set. For Units 1-2 students will study a variety of scripts and then present interpretations in the above areas. Unit 3 is a larger performance and must be presented to an outside audience other than their peers.

The final unit requires students to prepare an interpretation of a script to be presented to VCAA study assessors as well as complete a written final examination.

Each unit requires the viewing of a professional performance as well as a written analysis.

Please Note: Students must present their devised work to an audience. Theatre Technologies are utilized to enhance a performance however the key emphasis is on acting in all units.

AREAS OF STUDY

UNIT 1: History of theatre styles and conventions pre-1945

Students study theatre history and conventions before 1945. They experiment with scripts and exam movements and innovations both in performance styles as well as production areas. Students develop knowledge and skills about theatre production processes, including dramaturgy, planning, development, and performance to an audience, and they apply this knowledge and skill to their own work. They study safe, ethical, inclusive, and sustainable working practices in theatre production.

UNIT 2: Contemporary theatre styles and movements.

In this unit, students study contemporary theatre practice through the exploration of scripts from 1945 to the present day. They select scripts from either two distinct theatre styles OR a theatre movement between 1945 and the present day. In either option, students should study at least one Australian play.
This unit focuses on the application of acting, direction and design in relation to contemporary theatre practice from 1945 to the present day. Students work in production roles to interpret scripts. They study developments and innovations in theatre and apply this knowledge to their own work.

Students analyse and evaluate their own performance work as well as undertaking an analysis and evaluation of a performance of an Australian work by professional actors and develop an understanding of relevant drama terminology.

THEATRE STUDIES UNITS 3/4

OVERVIEW

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The final unit requires students to prepare an interpretation of a script to be presented to VCAA study assessors as well as complete a written final examination.

Each unit requires the viewing of a professional performance as well as a written analysis.

AREAS OF STUDY

UNIT 3: Producing theatre

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

UNIT 4: Presenting an Interpretation

In this unit, students study a scene and an associated monologue from a script. They initially develop an interpretation of the prescribed scene. This work includes exploring theatrical possibilities and using dramaturgy across the three stages of the production process. Students then develop an interpretation of the monologue that is embedded in the specified scene. To realise their interpretation, students work in production roles as an actor and director, or as a designer.
They develop a formal presentation to be presented to a group of outside VCAA assessors as part of their final exam. This presentation will be taken from a series of script excerpts for which students must either choose actor/director or two design roles.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways in:

- theatre production
- theatre history
- communication
- writing
- acting
- direction and design.

VISUAL COMMUNICATION DESIGN UNITS 1/2

OVERVIEW

Visual Communication Design is the study and practice of communicating design ideas in a visual way. Most of the messages and ideas that we receive in the world are communicated through visual media and this study starts to develop students' ability to produce and discern visual messages. Students learn to develop their problem-solving skills, drawing techniques and use a variety of media and methods to communicate their responses to a range of real-world problems. The study nurtures students' ability to think creatively about design solutions. Students work in the four areas of design: Messages, Objects, Environments and Interactive Experiences.

AREAS OF STUDY

Areas of study which Visual Communication Design leads to include Visual Arts, Design and Engineering Courses.

Design based careers - Interior design, graphic, design, set design, fashion, artist, communication design, florist, landscape architect, architect, set design, costume design, computer animation, illustration, industrial design, urban design, web design, game design, app design, automotive design, and furniture design.

AREAS OF STUDY

UNIT 1: Finding, reframing and resolving design problems

In this unit students are introduced to the practices and processes used by designers to identify, reframe and resolve human-centred design problems. They learn how design can improve life and living for people, communities and societies, and how understandings of good design have changed over time. Students learn the value of human-centred research methods, working collaboratively to discover design problems. Through the process of discovery students are introduced to the design process.

Practical projects in Unit 1 focus on the design of Messages and Objects, while introducing the role of visual language in communicating ideas and information. Students use methods, media and materials typically employed in the specialist fields of communication and industrial design. Student projects invite exploration of brand strategy and product development, while promoting sustainable and circular design practices. They also consider how design decisions are shaped by economic, technological, cultural, environmental and social factors, and the potential for design to instigate change.

UNIT 2: Design contexts and connections

Practical tasks across Unit 2 focus on the design of Environments and Interactive Experiences. Students adopt the practices of design specialists working in fields such as architecture, landscape architecture and interior design, while discovering the role of the interactive designer in the realm of user-experience (UX). Methods, media and materials are explored together with the design elements and principles, as students develop spaces and interfaces that respond to both where and what the user needs.

POSSIBLE FUTURE PATHWAYS

Unit 1 and 2 Visual Communication leads into Unit 3 and 4 Visual Communication.

There are folio building skills covered in Unit 1 and 2 Visual Communication that can also be used in Unit 3 and 4 Art Creative Practice and Art Making and Exhibiting.

VISUAL COMMUNICATION DESIGN UNITS 3/4

OVERVIEW

In this unit students gain an understanding of the process designers employ to structure their thinking and communicate ideas with clients, target audiences, other designers, and specialists. Through practical investigation and analysis of existing visual communications, students gain insight into how the selection of methods, media and materials, and the application of design elements and design principles, can create effective visual communications for specific audiences and purposes.

UNIT 3: *Visual communication in design practice*

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

Students explore the Discover, Define and Develop phases of the VCD design process to address a selected design problem. In the Discover and Define phases, research methods are used to gather insights about a design problem, before preparing a design brief for a real or fictional client that defines two distinct design needs. Students then embark on the Develop phase of the VCD design process, once for each design, generating design ideas. These design ideas are further developed in Unit 4, before refinement and resolution of design solutions.

UNIT 4: Delivering design solutions

The focus of this unit is to continue to use the VCD design process to resolve design concepts, create and present solutions for two distinct communication needs. Manual and digital methods, media and materials are explored together with design elements and principles to consider aesthetic impact. Concepts/design ideas are tested using models, mock-ups or low-fidelity prototypes.

POSSIBLE FUTURE PATHWAYS

Many Tertiary Design courses use an interview process for admission and require a folio.

Visual Communication Design develops creative thinking skills that are transferable into many different pathways for students including the following: Visual Arts, Design and Engineering Courses.

Design based careers - interior design, graphic, design, set design, fashion, artist, communication design, florist, landscape architect, architect, set design, costume design, computer animation, illustration, industrial design, urban design, web design, game design, app design, automotive design, and furniture design.

COURSE
TALK
LANGUAGE
TEACH
CONVERSATION
LITERATURE
A
B
C
D
ENGLISH
WORDING
SPEAKING
LEARN
LISTENING
PROGRAM
GRAMMA
STUDENT
ESSAY
WORDS
VOCABULARY
WRITING

ENGLISH

ENGLISH / EAL UNITS 1/2

OVERVIEW

Units 1 and 2 is the first year of VCE English and links closely with English studied from Year 7 through to Year 10. English empowers students to read, write, speak, and listen in different contexts. They extend their skills in responding to the texts they read and view, and their abilities in creating original texts, further expanding their language to reflect accurately the purpose, audience, and context of their responses.

They will explore the use of persuasive language and argument to persuade an audience. These skills will then be used to create a written analytical response and the presentation of a speech.

Students are required to think about the construction and purpose of texts. They will explore possible interpretations of what they read and view, forming their own interpretations.

AREAS OF STUDY

Unit 1 - Reading and Exploring Texts

Students engage in reading and viewing texts with a focus on personal connections with the story. They discuss and clarify the ideas and values presented by authors through their evocations of character, setting and plot, and through investigations of the point of view and/or the voice of the text.

Crafting Texts

On completion of this unit, students develop an understanding of effective and cohesive writing. They apply, extend, and challenge their understanding and use imaginative, persuasive, and informative text through a growing awareness of situated contexts, stated purposes and audience.

Unit 2 - Reading and Exploring Texts

In this area of study, students develop their reading and viewing skills, including deepening their capacity for inferential reading and viewing, to further open possible meanings in a text, and to extend their writing in response to text.

Exploring Argument

On completion of this unit, students consider the way arguments are developed and delivered in many forms of media. Through the prism of a contemporary and substantial local and/or national issue, students read, view, and listen to a range of texts that attempt to position an intended audience in a particular context. They closely examine the language and the visuals employed by the author and offer analysis of the intended effect on the audience. Students apply their knowledge of argument to create a point of view for oral presentation.

POSSIBLE FUTURE PATHWAYS

English forms a basis for students to be able to communicate with others effectively and to better understand the world around them.

Studying this subject can lead to pathways in:

- arts
- communications
- law
- publishing
- writing
- education
- advertising.

ENGLISH / EAL UNITS 3/4

OVERVIEW

Units 3 and 4 is the culmination of a student's study of English. Following on from Units 1 and 2, students respond to texts in both a creative and analytical fashion. They extend on these skills by comparing two texts in a manner which unpacks the texts' key ideas and their construction.

Students also analyse the use of language in its pursuit to persuade audiences, using these skills themselves when drafting and presenting a persuasive oral presentation.

Students are required to think critically and provide their own unique interpretations of what they read and view. Strong emphasis is placed upon class discussion and contributions from students.

AREAS OF STUDY

Reading and Responding to Texts

Students apply reading and viewing strategies to critically engage with a text, considering its dynamics and complexities and reflecting on the motivations of its characters. They analyse the ways authors construct meaning through vocabulary, text structures, language features and conventions and the presentation of ideas.

Creating Texts

Building on knowledge and skills, students read and engage imaginatively and critically with mentor texts. Through close reading, students expand their understanding of the diverse ways that vocabulary, text structures, language features, conventions and ideas can interweave to create compelling texts.

Reading and Responding to Texts

Students consolidate their capacity to critically analyse texts and deepen their understanding of the ideas and values a text can convey. They discuss the ways authors construct meaning in a text through the presentation of ideas, concerns and conflicts, and the use of vocabulary, text structures and language features.

Analysing Argument

Students analyse the use of argument and language, and visuals in texts that debate a contemporary and significant national or international issue.

POSSIBLE FUTURE PATHWAYS

Many university courses have a minimum requirement in terms of the study score achieved for one of the English group subjects (English, English Language and Literature).

English forms a basis for students to be able to communicate with others effectively and to better understand the world around them.

Studying this subject can lead to pathways in:

- art
- communications
- law
- writing
- publishing
- education
- advertising.

HUMANITIES

ECONOMICS UNIT 1/2

OVERVIEW

VCE Economics is a dynamic and constantly evolving field of social science, which looks at the way humans behave and the decisions made to meet the needs and wants of society.

To commence their Economics studies, in Units 1 and 2 students will learn students explore their role in the economy, how they interact with businesses, and the role of the government in the economy. Students will be introduced to and explore fundamental economic concepts.

Students will also use demand and supply models to explain changes in prices and quantities traded and how this impacts efficiency and living standards.

Students will consider insights of behavioural economics and how those insights contrast with the traditional model of consumer behaviour. They will investigate at least one behavioural economics experiment.

Students consider the link between economic activity and economic growth and investigate the importance of economic growth in raising living standards. They evaluate the benefits and costs of continued economic growth and consider the extent to which our current measurements of living standards are adequate.

Students will undertake an applied economic analysis of two contemporary economics issues from a local, national and international perspective. They use the tools of data collection, analysis, synthesis and evaluation to examine the issue through an economics lens.

AREAS OF STUDY

Thinking Like an Economist

On completion of this unit the student should be able to describe the basic economic problem, discuss the role of consumers, businesses and the government in the economy, and analyse the factors that affect economic decision-making.

Decision-Making in Markets

On completion of this unit the student should be able to explain the role of relative prices and other non-price factors in the allocation of resources in a market-based economy and analyse the extent of competition in markets.

Behavioural Economics

On completion of this unit the student should be able to explain how behavioural economics complements traditional understandings of decision-making, and analyse the effects of behavioural economics insights on consumers and other economic agents.

Economic Activity

On completion of this unit the student should be able to explain the purpose of economic activity, the distinction between material and non-material living standards and the factors that may affect levels of economic activity and growth.

Applied economic analysis of local, national and international economic issues

On completion of this unit the student should be able to explain the factors that affect two economic issues at a local, national and international level and evaluate actions to address the issues.

POSSIBLE FUTURE PATHWAYS

VCE Economics develops knowledge and skills that enhance student confidence and their ability to make more informed and responsible decisions both individually and as members of society.

Studying this subject can lead to pathways in:

- government and policy
- management
- banking and finance
- business and consulting
- industry and trade
- not-for-profit

international trade

ECONOMICS UNIT 3/4

OVERVIEW

VCE Economics is a dynamic and constantly evolving field of social science, which looks at the way humans behave and the decisions made to meet the needs and wants of society.

Units 3 and 4 will build on the skills and concepts introduced to students in Units 1 and 2, with a focus on managing the economy and Australia's living standards.

Unit 3 focuses on the role of the market in allocating resources and examining the factors that affect the price and quantity traded for a range of goods and services. Students will develop an understanding of the key measures of efficiency and how market systems might result in efficient outcomes. Students will also investigate the importance of international economic relationships and the effect of these on Australian living standards.

Unit 4 focuses on students developing an understanding of how the Australian Government can alter the composition of budgetary outlays and receipts to directly and indirectly affect the level of aggregate demand, the achievement of domestic macroeconomic goals and living standards. Students will also examine the role of the RBA with a focus on its responsibility to conduct monetary policy.

AREAS OF STUDY

An introduction to microeconomics: the market system, resource allocation and government intervention

In this area of study students investigate the role of the market in addressing the key economic questions of what and how much to produce, how to produce and for whom to produce. Students will also consider the effects of decisions made by consumers and businesses on what goods and services are produced, the quantities in which they are produced, the way they are produced and to whom they are distributed.

Domestic macroeconomic goals

In this area of study students investigate Australia's domestic macroeconomic goals supporting living standards, including strong and sustainable economic growth, full employment and low and stable inflation (price stability). Students will consider the role of key economic agents and examine the factors that affect the business cycle.

Australia and the International Economy

Students will be able to analyse the factors that may affect the exchange rate, terms of trade and Australia's international competitiveness, and discuss their impact on Australia's international transactions and the achievement of the domestic macroeconomic goals and living standards.

Aggregate demand policies and domestic economic stability

Students discuss the operation of aggregate demand policies, and analyse how current aggregate demand policy settings are intended to effect the achievement of the domestic macroeconomic goals and influence living standards.

POSSIBLE FUTURE PATHWAYS

VCE Economics develops knowledge and skills that enhance student confidence and their ability to make more informed and responsible decisions both individually and as members of society.

Aggregate Supply Policies

Students should be able to discuss the operation of aggregate supply policies and analyse the effect of these policies on the domestic macroeconomic goals and living standards.

Studying this subject can lead to pathways in:

- government and policy
- management
- banking and finance
- business and consulting
- industry and trade
- not-for-profit
- international trade

BUSINESS MANAGEMENT UNITS 1/2

OVERVIEW

VCE Business Management follows the process from the first idea for a business concept, to planning and establishing a business, through to the day-to-day management of a business. It also considers changes that need to be made to ensure the continued success of a business.

In Unit 1, 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.

In Unit 2, students examine the legal requirements that must be satisfied to establish a business. Students investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing.

This subject may be selected by Year 10 students.

AREAS OF STUDY

The Business Idea

Students investigate how and why business ideas are created and explain the methods by which a culture of entrepreneurship may be fostered in a nation. Students conduct an interview with a business owner and apply their knowledge in a written report.

Internal Business Environment and Planning

Students will study the internal factors which impact business planning. Students will plan their own business, writing a business plan and running this business on Market Day.

External Business Environment and Planning

Students consider factors from the external environment such as legal, political, social, economic, technological, global, and corporate social responsibility factors and the effects these may have on the decisions made when planning a business.

Legal Requirements and Financial Considerations

Students will consider the importance of complying with laws and maintaining accurate financial recording keeping when establishing a business.

Marketing A Business

Students will study marketing strategies used by businesses to establish a customer base and marketing presence. Students will develop, write, and present their own Marketing Pitch on a business scenario.

Staffing Requirements

Students will evaluate the staffing needs of businesses; examining case studies which highlight the costs and benefits of various management strategies.

POSSIBLE FUTURE PATHWAYS

Business Management fosters enterprising behaviours, interpersonal, collaborative, and negotiating skills that are transferable into life, work, and business situations.

Studying this subject can lead to pathways in:

- marketing
- advertising
- human resource management
- commerce economics education
- business ownership.

BUSINESS MANAGEMENT UNITS 3/4

OVERVIEW

Units 3 and 4 Business Management examines managing a business and transforming a business.

In Unit 3, students will explore the key processes and issues concerned with managing both staff and business operations efficiently and effectively and strategies to achieve the business objectives. Students develop an understanding of the complexity and challenge of managing businesses and, through the exploration of contemporary business case studies, to compare theoretical perspectives with current practice.

In Unit 4, students consider the importance of reviewing key performance indicators to determine current performance and the strategic management necessary to position a business for the future. Students study a theoretical model to undertake change and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance.

AREAS OF STUDY

Business Foundations

Students will discuss key characteristics of businesses and stakeholders, and analyse the relationship between corporate culture, management styles and management skills.

Human Resource Management

Students will analyse theories of motivation and apply them to a range of contexts and analyse and evaluate strategies related to the management of employees.

Operations Management

Students will analyse the relationship between business objectives and operations management and propose and evaluate strategies to improve the efficiency and effectiveness of business operations.

Reviewing Performance - The Need for Change

Students will explain the way business change may come about, use key performance indicators to analyse the performance of a business, discuss the driving and restraining forces for change and evaluate management strategies to position a business for the future.

Implementing Change

Students will evaluate the effectiveness of a variety of strategies used by managers to implement change and discuss the effect of change on the stakeholders of a business.

POSSIBLE FUTURE PATHWAYS

Business Management aims to develop enterprising behaviours that can help establish a business, problem-solving and decision-making skills.

Studying this subject can lead to pathways in:

- commerce
- accounting and finance
- supply chain management
- economics
- event management
- human resource management.

MODERN HISTORY UNITS 1/2

OVERVIEW

VCE History assists students to understand themselves, others, and their world, and broadens their perspective by examining people, groups, events, ideas, and movements. Through studying VCE History, students develop social, political, economic, and cultural understanding. They also explore continuity and change: the world is not as it has always been, and it will be subject to change in the future.

Students will engage in utilising a range of historical skills such as analysing primary and secondary sources, using historical thinking concepts (significance, evidence, continuity and change, and causation), conduct historical inquiry, ask questions about the past, and recognise that the way in which we understand the past informs decision-making in the present.

AREAS OF STUDY

Ideology, Conflict, and Social and Cultural Change

Students explore the nature of political, social, and cultural change in the period between the world wars. Included in this are the impacts of the post-war treaties; the rise of fascist ideologies, such as Nazism; the significant events that led to World War Two; and the influence of politics, economics and technology on German society and culture during the interwar period.

Competing Ideologies and Challenge and Change

Students explore the nature and impact of the Cold War and challenges and changes to existing political, economic, and social arrangements in the second half of the 20th Century. Included in this are the causes, features, and impacts of the Cold War; and the causes and nature of challenge and change in relation to the anti-Apartheid movement in South Africa and the civil rights movement in the United States of America.

POSSIBLE FUTURE PATHWAYS

VCE History enables students to acquire inquiry and critical thinking skills that will assist in the formation of arguments and develop critical thinking.

Studying this subject can lead to pathways in:

- history
- philosophy
- archaeology
- sociology
- anthropology
- psychology
- languages
- education.

HISTORY REVOLUTIONS UNITS 3/4

OVERVIEW

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution. In these units, students develop an understanding of the complexity and multiplicity of causes and consequences in the revolutionary narrative. They construct an argument about the past using primary sources as evidence and evaluate the extent to which the revolution brought change to the lives of people.

Students consider how perspectives of the revolution give an insight into the continuity and change experienced by those who lived through dramatic revolutionary moments. Students also evaluate historical interpretations about the causes and consequences of revolutions and the effects of change instigated by the new order.

Students at Bairnsdale Secondary College study the American and Russian revolutions.

AREAS OF STUDY

Causes of Revolution

Students will analyse the causes of revolution, and evaluate the contribution of significant ideas, events, individuals, and popular movements.

Consequences of Revolution

Students will analyse the consequences of revolution and evaluate the extent of change brought to society.

POSSIBLE FUTURE PATHWAYS

The skills and knowledge learnt in History Revolutions provide employability skills such as, initiative and enterprise, planning and organising, problem solving, self- management and communication skills.

Studying this subject can lead to pathways in:

- history
- philosophy
- archaeology
- sociology
- anthropology
- psychology
- languages
- education.

LEGAL STUDIES UNITS 1/2

OVERVIEW

VCE Legal Studies examines the institutions and principles which are essential to Australia's legal system. In Units 1 and 2, students develop an understanding of the rule of law, lawmakers, key legal institutions, rights protection in Australia, and the justice system.

Students become active and informed citizens through gaining valuable insights into their relationship with the law and the legal system. They develop knowledge and skills that enhance their confidence and ability to access and participate in the legal system.

Students are required to research and analyse legal information and apply legal reasoning and decision-making skills to solve legal problems.

AREAS OF STUDY

Legal Foundations

Students will explore the role of individuals, laws, and the legal system in achieving social cohesion and protecting the rights of individuals. They will also consider the characteristics of an effective law, and sources and types of law.

Proving of Guilt

Students will develop an understanding of the purposes of and key concepts in criminal law, as well as the types of crime. They also investigate two criminal offences in detail.

Sanctions

Students will explain key concepts in the determination of a criminal case. Through an investigation of two criminal cases, students discuss the principles of justice in relation to criminal cases, sanctions, and sentencing approaches.

Civil Liability

Students will explain the purposes and key concepts of civil law and apply legal reasoning to argue the liability of a party in civil law in given scenarios.

Remedies

Through an investigation of two civil cases, students will explain key concepts in the resolution of a civil dispute and discuss the principles of justice in relation to the resolution of civil disputes and remedies.

Human Rights

Students will evaluate the ways in which rights are protected in Australia, compare this approach with another country's approach and discuss the impact of an Australian case on the rights of individuals and the legal system.

POSSIBLE FUTURE PATHWAYS

Legal Studies enables students to become active and informed citizens and fosters critical thinking skills.

Studying this subject can lead to pathways in:

- law
- law enforcement
- immigration
- education
- social work.

LEGAL STUDIES UNITS 3/4

OVERVIEW

VCE Legal Studies examines the institutions and principles which are essential to Australia's legal system. In Units 3 and 4, students build on their knowledge of the rule of law, lawmakers, key legal institutions, rights protection in Australia, and the justice system.

Students become active and informed citizens through gaining valuable insights into their relationship with the law and the legal system. They develop knowledge and skills that enhance their confidence and ability to access and participate in the legal system.

Students are required to research and analyse legal information and apply legal reasoning and decision-making skills to solve legal problems.

AREAS OF STUDY

The Victorian Criminal Justice System

Students will explain the rights of the accused and of victims in the criminal justice system, discuss the means used to determine criminal cases and evaluate the ability of the criminal justice system to achieve the principles of justice.

The Victorian Civil Justice System

Students will analyse the factors to consider when initiating a civil claim, discuss the institutions and methods used to resolve civil disputes and evaluate the ability of the civil justice system to achieve the principles of justice.

The People and the law makers

Students will discuss the significance of High Court cases involving the interpretation of the Australian Constitution and evaluate the ways in which the Australian Constitution acts as a check on parliament in law-making.

The People and Reform

Students will discuss the factors that affect the ability of parliament and courts to make law, evaluate the ability of these lawmakers to respond to the need for law reform, and analyse how individuals, the media and law reform bodies can influence a change in the law.

POSSIBLE FUTURE PATHWAYS

Legal Studies enables students to become active and informed citizens and fosters critical thinking skills.

Studying this subject can lead to pathways in:

- law
- law enforcement
- immigration
- education
- social work.

SOCIOLOGY UNTS 1/2

OVERVIEW

Sociology focuses on the study of human behaviour and social interaction to understand how societies are organised, develop and change. In VCE Sociology students examine key theories regarding family, deviance, ethnicity, community, and social movements. Students are encouraged to question their assumptions and to reflect on their understandings and ideas about social relations.

AREAS OF STUDY

Unit 1: Youth and Family

This unit explores the social categories of youth and adolescence and the social institution of family. Students learn how to recognise and define social categories, how these have changed over time, and the factors that lead to differences in the experiences of being young. They learn about a range of social institutions and interpret these through various perspectives, particularly functionalism and feminism. They investigate the issues with homogenous thinking and stereotyping for both youth and the family

Unit 2: Deviance and Crime

This area of study focuses on the concept of deviance, including how what is considered deviant may differ according to age and social status and across time and space. Students learn about the meaning of deviance; how various sociologists explain deviant behaviour and the impact of moral panic on society. Students also study the sociological concept of crime, including Australian data and crime rates, the range of factors that lead people to commit crimes and the aims and realities of punishment.

POSSIBLE FUTURE PATHWAYS

Sociology enables students to become active and informed citizens and fosters critical thinking skills about the social world, and the ways in which people interact with each other.

Studying this subject can lead to pathways in:

- teaching
- nursing
- police force
- social or youth work
- town planner
- research
- government work.

SOCIOLOGY UNTS 3/4

OVERVIEW

Sociology focuses on the study of human behaviour and social interaction to understand how societies are organised, develop and change. In VCE Sociology students examine key theories regarding Australian Indigenous Culture, ethnicity, community, and social movements. Students are encouraged to question their assumptions and to reflect on their understandings and ideas about social relations.

AREAS OF STUDY

Culture and Ethnicity

This unit explores expressions of culture and ethnicity within Australian society in two different contexts – Australian Indigenous culture and ethnicity in relation to migrant groups. Culture and ethnicity refer to groups connected by shared customs, culture, or heritage. Students study the history of white settlement and its impact, the suppression of Indigenous Australians through Government policies and Australia's ethnic diversity. Students engage with Indigenous culture through excursions to the Keeping Place and Indigenous guest speakers and complete a detailed investigation of a specific ethnic group in Australia.

Community, Social Movements and Social Change

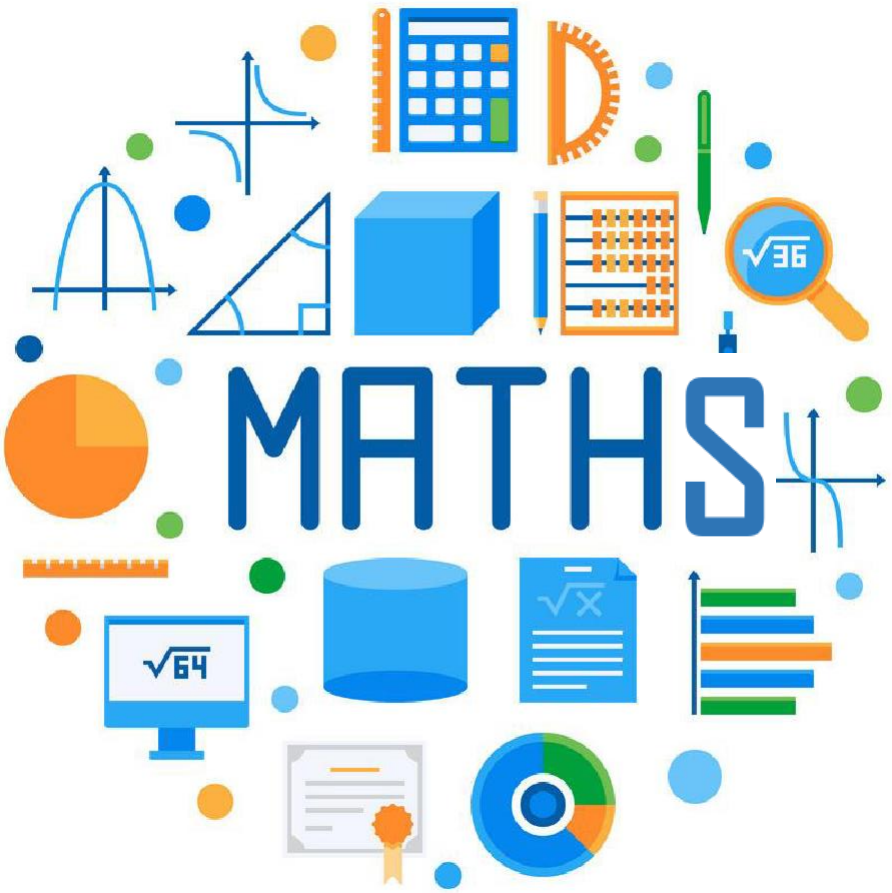
In this unit students explore the ways sociologists have thought about the idea of community and the concept of community over time and the use of ethics in Sociological research. Students finish this unit studying the concepts of social movement and social change, the relationship between social movements and social change, the nature of social movements and the nature of specific social movements, including an environmental movement.

POSSIBLE FUTURE PATHWAYS

Sociology enables students to become active and informed citizens and fosters critical thinking skills about the social world, and the ways in which people interact with each other.

Studying this subject can lead to pathways in:

- teaching
- nursing
- police force
- social or youth work
- town planner
- research



MATHS

GENERAL MATHEMATICS UNITS 1/2

OVERVIEW

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

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

AREAS OF STUDY

Students will complete a range of Work Requirements and School Assessed Coursework in each of the five modules:

Data Analysis, Probability and Statistics

In unit 1 students will cover types of data, display and description of the distribution of data, summary statistics for centre and spread, and the comparison of sets of data. In unit 2 students will cover association between two numerical variables, scatterplots, and lines of good fit by eye and their interpretation.

Algebra, Number and Structure

In unit 1 students will cover the concept of a sequence and its representation by a rule, arithmetic, and geometric sequences as examples of sequences generated by first-order recurrence relations.

Functions, Relations and Graphs

In unit 1 students will cover linear relations, their graphs and modelling with linear functions. In unit 2 students will cover direct and indirect variation and transformations to linearity.

Discrete Mathematics

In unit 1 students will cover the concept of a matrix and using matrix operations to model and solve a range of practical problems. In unit 2 students will use graphs and networks to solve a range of practical problems.

Geometry, Measurement and Trigonometry

In unit 2 students will cover units of measurement, computation with formulas for different measures, similarity, and scale in two and three dimensions and their application in simple and composite shapes and objects, trigonometry, problems involving navigation using Pythagoras Theorem.

POSSIBLE FUTURE PATHWAYS

Mathematics forms a basis for students to be able to calculate and solve problems in their daily lives and future careers.

Studying this subject can lead to pathways in:

- education
- health science
- psychology
- nursing.

GENERAL MATHEMATICS UNITS 3/4

OVERVIEW

General Mathematics Units 3 and 4 focus on real-life application of mathematics and consist of the areas of study 'Data analysis', 'Recursion and Financial Modelling' 'Matrices and their applications', and 'Networks and decision-making mathematics'.

Unit 3 comprises of Data analysis and Recursion and financial modelling, and Unit 4 comprises of Matrices and Financial Modelling and Networks and decision-making mathematics.

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

AREAS OF STUDY

Data Analysis

This involves the investigation of data distributions, including:

- reviewing types of data
- reviewing of representation,
- using of the distribution/s of one or more categorical variables to answer statistical questions
- reviewing representation.

Recursion and Financial Modelling

This topic covers the use of first-order linear recurrence relations and technology to model and analyse a range of financial situations, and solve related problems involving interest, appreciation and depreciation, loans, annuities, and perpetuities.

Matrices and their applications

This topic covers the definition of matrices, different types of matrices, matrix operations, transition matrices and the use of first-order linear matrix recurrence relations to model a range of situations and solve related problems.

Networks and decision-making mathematics

This topic covers the definition and representation of different kinds of undirected and directed graphs, Eulerian trails, Eulerian circuits, bridges, Hamiltonian paths and cycles, and the use of networks to model and solve problems involving travel, connection, flow, matching, allocation, and scheduling.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways as a:

- business manager
- small business owner
- accountant
- financial advisor
- economist
- nurse.

MATHEMATICAL METHODS UNITS 1/2

OVERVIEW

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

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

AREAS OF STUDY

Functions, Relations, and Graphs

In this area of study students cover the graphical representation of simple algebraic functions (polynomial and power functions) of a single real variable and the key features of functions and their graphs such as axis intercepts, domain (including the concept of maximal, natural, or implied domain), co-domain and range, stationary points, asymptotic behaviour, and symmetry. The behaviour of functions and their graphs is to be explored in a variety of modelling contexts and theoretical investigations.

Algebra, number, and structure

This area of study supports students' work in the 'Functions, relations, and graphs', 'Calculus' and 'Data analysis, probability and statistics' areas of study, and content is to be distributed between Units 1 and 2. In Unit 1 the focus is on the algebra of polynomial functions of low degree and transformations of the plane.

Calculus

In this area of study students cover constant and average rates of change and an introduction to instantaneous rate of change of a function in familiar contexts, including graphical and numerical approaches to estimating and approximating these rates of change.

Data Analysis, Probability and Statistics

In this area of study students cover the concepts of experiment (trial), outcome, event, frequency, probability and representation of finite sample spaces and events using various forms such as lists, grids, Venn diagrams and tables. They also cover introductory counting principles and techniques and their application to probability.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways as an:

- engineer
- accountant
- surveyor
- pilot
- geophysicist
- medical practitioner
- computer programmer
- data scientist
- biochemist.

MATHEMATICAL METHODS UNITS 3/4

OVERVIEW

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

The selection of content from the areas of study should be constructed so that there is a development in the complexity and sophistication of problem types and mathematical processes used (modelling, transformations, graph sketching and equation solving) in application to contexts related to these areas of study.

AREAS OF STUDY

Functions, Relations, and Graphs

In this area of study students cover transformations of the plane and the behaviour of some elementary functions of a single real variable, including key features of their graphs such as axis intercepts, stationary points, points of inflection, domain (including maximal, implied, or natural domain), co-domain and range, asymptotic behaviour, and symmetry. The behaviour of functions and their graphs is to be explored in a variety of modelling contexts and theoretical investigations.

Algebra, Number and Structure

In this area of study students cover the algebra of functions, including composition of functions, inverse functions, and the solution of equations. They also study the identification of appropriate solution processes for solving equations, and systems of simultaneous equations, presented in various forms. Students also cover recognition of equations and systems of equations that are solvable using inverse operations or factorisation, and the use of graphical and numerical approaches for problems involving equations where exact value solutions are not required, or which are not solvable by other methods.

Calculus

In this area of study students cover graphical treatment of limits, continuity, and differentiability of functions of a single real variable, and differentiation, anti-differentiation, and integration of these functions. This material is to be linked to applications in practical situations.

Data Analysis, Probability and Statistics

In this area of study students cover discrete and continuous random variables, their representation using tables, probability functions (specified by rule and defining parameters as appropriate); the calculation and interpretation of central measures and measures of spread; and statistical inference for sample proportions. The focus is on understanding the notion of a random variable, related parameters, properties and application and interpretation in context for a given probability distribution.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways as:

- engineer
- accountant
- surveyor
- pilot
- geophysicist

- medical practitioner
- data scientist
- computer programmer
- biochemist.

SPECIALIST MATHEMATICS UNITS 3/4

OVERVIEW

Specialist Mathematics Units 3 and 4 consist of the areas of study: 'Algebra, number and structure', 'Calculus', 'Data analysis, probability, and statistics', 'Discrete mathematics', 'Functions, relations, and graphs', and 'Space and measurement'. The development of course content should highlight mathematical structure, reasoning and proof and applications across a range of modelling contexts with an appropriate selection of content for each of Unit 3 and Unit 4.

Specialist Mathematics Units 3 and 4 assumes familiarity with the key knowledge and key skills from Mathematical Methods Units 1 and 2; the key knowledge and key skills from Specialist Mathematics Units 1 and 2; and concurrent study or previous completion of Mathematical Methods Units 3 and 4.

AREAS OF STUDY

Logic and Proof

In this area of study students cover the development of mathematical argument and proof. This includes conjectures, connectives, quantifiers, examples and counter-examples, and proof techniques including mathematical induction. Proofs will involve concepts from topics such as: divisibility, inequalities, graph theory, combinatorics, sequences, and series including partial sums and partial products and related notations, complex numbers, matrices, vectors, and calculus.

Functions, Relations, and Graphs

In this area of study students cover rational functions and other simple quotient functions, curve sketching of these functions and relations, and the analysis of key features of their graphs including intercepts, asymptotic behaviour and the nature and location of stationary points and points of inflection and symmetry.

Algebra, Number and Structure

In this area of study students cover the algebra of complex numbers, including polar form, factorisation of polynomial functions over the complex field and an informal treatment of the fundamental theorem of algebra.

Calculus

In this area of study students cover the advanced calculus techniques for analytical and numerical differentiation and integration of a broad range of functions, and combinations of functions; and their application in a variety of theoretical and practical situations, including curve sketching, evaluation of arc length, area and volume, differential equations and kinematics, and modelling with differential equations drawing from a variety of fields such as biology, economics, and science.

Space and Measurement

In this area of study students cover the arithmetic and algebra of vectors; linear dependence and independence of a set of vectors; proof of geometric results using vectors; vector representation of curves in the plane and their parametric and Cartesian equations; vector kinematics in one, two and three dimensions; vector, parametric and Cartesian equations of lines and planes.

Data Analysis, Probability and Statistics

In this area of study students cover the study of linear combinations of random variables and introductory statistical inference with respect to the mean of a single population, the determination of confidence intervals, and hypothesis testing for the mean using the distribution of sample means.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways as:

- engineer
- geophysicist
- medical practitioner
- computer programmer
- biochemist
- naval architect
- meteorologist
- optometrist.

HEALTH AND PHYSICAL EDUCATION

HEALTH AND HUMAN DEVELOPMENT UNITS 1/2

OVERVIEW

Units 1 and 2 VCE Health and Human Development provides students with a broad understanding of health and wellbeing. Students learn how important health and wellbeing is to themselves and to families, communities, and the nation. Students explore the complex interplay of sociocultural factors that support and improve an individual's health and wellbeing. The study provides opportunities for students to view health and wellbeing, and development, holistically and across the lifespan, from a range of different perspectives.

Unit 1 and 2 VCE Health and Human Development is designed to foster health literacy and to develop students' ability to navigate health information and the Australian Healthcare system. They develop a capacity to respond to health information, advertising, and other media messages, enabling them to put strategies into action to promote health and wellbeing in both personal and community contexts.

AREAS OF STUDY

Unit 1 – Understanding Health and Wellbeing

Students will look at health and wellbeing as a concept with varied perspectives and definitions. As a foundation to the understanding of health, students should investigate the World Health Organisation's (WHO) definition and explore other interpretations.

Students will be encouraged to identify personal perspectives and priorities relating to health and wellbeing, and enquire into factors that influence health attitudes, beliefs, and practices, including among Aboriginal and Torres Strait Islanders.

Students look at multiple dimensions of health and wellbeing, the complex interplay of influences on health and wellbeing and the indicators used to measure and evaluate health status. With a focus on youth, students consider their own health as individuals and as a cohort. They build health literacy through interpreting and using data, through investigating the role of food and nutrition, and through an extended inquiry into one youth health focus area.

Unit 2 Managing Health and Wellbeing

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

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

POSSIBLE FUTURE PATHWAYS

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

HEALTH AND HUMAN DEVELOPMENT UNITS 3/4

OVERVIEW

VCE Health and Human Development provides students with broad understandings of health and wellbeing that reach far beyond the individual. Students explore the complex interplay of biological, sociocultural, and environmental factors that support and improve health and wellbeing and those who put it at risk. The study provides opportunities for students to view health and wellbeing, and development, holistically across the globe, and through a lens of social equity and justice. As individuals and as citizens, students develop their ability to navigate information, to recognise and enact supportive behaviours, and to evaluate healthcare initiatives and interventions. Students take this capacity with them as they leave school and apply their learning in positive and resilient ways through future changes and challenges.

AREAS OF STUDY

Unit 3 – Australia's Health in a Globalised World

Understanding health and wellbeing

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

Promoting health and wellbeing

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

Unit 4 – Health and Human Development in a Global Context

Global health and human development

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

Health and the sustainable development goals

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

POSSIBLE FUTURE PATHWAYS

Health and Human Development offers students a range of pathways including further formal study in:

- health promotion
- community health research and policy development
- humanitarian aid work
- allied health practices
- education
- health professions.

PHYSICAL EDUCATION UNITS 1/2

OVERVIEW

Students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Through practical activities students explore the relationships between the body systems and physical activity, sport, and exercise, and how the systems adapt and adjust to the demands of the activity. Students investigate the role and function of the main structures in each system and how they respond to physical activity, sport, and exercise. They explore how the capacity and functioning of each system acts as an enabler or barrier to movement and participation in physical activity.

Unit 2 develops students' understanding of physical activity, sport, and society from a participatory perspective. Students are introduced to types of physical activity and the role participation in physical activity and sedentary behaviour plays in their own health and wellbeing as well as in other people's lives in different population groups.

AREAS OF STUDY

Unit 1: The Human body in motion: How does the musculoskeletal system work to produce movement?

In this area of study students examine the musculoskeletal system of the human body and how the muscles and bones work together to produce movement. Through practical activities they explore the major components of the musculoskeletal system and their contributions and interactions during physical activity, sport, and exercise.

What role does the cardiorespiratory system play in movement?

In this area of study, students investigate the cardiovascular and respiratory systems of the human body and how the heart, blood vessels and lungs function at rest and during physical activity. Through practical activities, students explore the structures and function of the cardiorespiratory system and the contributions and interactions of each system during physical activity, sport and exercise at various intensities. The impacts of regular aerobic exercise on the functioning of these systems are also examined. Students consider a variety of permitted and prohibited substances and methods used to enhance performance of the cardiorespiratory system. They also explore the ethical and sociocultural considerations of using permitted and prohibited performance-enhancing substances and methods.

Unit 2: Physical activity, sport, exercise and society: How do physical activity, sport and exercise contribute to healthy lifestyles?

In this area of study, students focus on the role of physical activity, sport and exercise in developing and promoting healthy lifestyles across the lifespan. Students explore the sociocultural influences on participation in various forms of physical activity. They investigate the physical, social, mental, emotional and spiritual benefits of participation in regular physical activity at the individual and population levels, and the potential health risks associated with physical inactivity and sedentary behaviour.

What are the contemporary issues associated with physical activity and sport?

In this area of study, students focus on a range of contemporary issues associated with physical activity and/or sport at the local, national, and global level. They investigate in detail one issue relevant to physical activity and/ or sport.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways as:

- sports scientist
- fitness trainer
- coach
- physiotherapist
- sport and recreation officer
- fitness instructor.

PHYSICAL EDUCATION UNITS 3/4

OVERVIEW

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

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

AREAS OF STUDY

Unit 3: How are movement skills improved?

In this area of study, students examine the biomechanical and skill-acquisition principles that can be applied when analysing and improving movement skills for participation and performance.

Through practical activities, students explore and analyse their own movement and use coaching to investigate factors that influence skill acquisition. They develop an understanding of how appropriately applying biomechanical and skill-acquisition principles leads to the development of optimal movement patterns to enhance participation and performance.

How does the body produce energy?

In this area of study, students explore the various systems and mechanisms associated with the production of energy required for human movement. They consider the cardiovascular, respiratory and muscular systems and the roles of each in supplying oxygen to, and creating energy at, the working muscles. They examine the ways in which energy for movement is produced by the 3 energy systems and the associated fuels used for physical activity, sport and exercise of varying intensity and duration. Students also consider the many factors contributing to fatigue, nutritional tools to delay fatigue and recovery strategies used to optimise the return to pre-exercise conditions. Through practical activities, students explore the interplay of the energy systems during physical activity, sport and exercise.

Unit 4: What are the foundations of an effective training program?

In this area of study, students analyse the information required to form the foundation of an effective training program. Through participation, they undertake and collect data from an activity analysis and justify the specific physiological requirements of an activity.

Students determine the relevant factors that affect each of the fitness components and conduct an assessment of fitness that demonstrates correct and appropriate implementation of testing protocols and procedures and informs the design of the training program.

How is training implemented effectively to improve fitness?

In this area of study, students focus on participation, implementation and evaluation of training principles and methods from practical and theoretical perspectives. They consider the ways in which fitness can be improved by applying appropriate training principles and methods when designing and critiquing a training program. Students identify and consider components of an exercise training session, and they record and analyse relevant data that can be used to adjust training. Students explain the chronic adaptations of the cardiovascular, respiratory and muscular systems that improve fitness and enhance performance.

Integrated movement experiences

In this area of study, students reflect on their participation in a practical activity and use primary data collected to demonstrate their integration of theory and practice across Units 3 and 4. Using an interdisciplinary approach, students are required to analyse the interrelationships between skill acquisition, biomechanics, energy production and training, and the impacts these have on performance.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways as:

- sports scientist
- fitness trainer
- coach
- physiotherapist
- sport and recreation officer.
- fitness instructor.

OUTDOOR AND ENVIRONMENTAL STUDIES UNITS 1/2

OVERVIEW

Students examine some of the ways in which humans understand and relate to nature through experiences of outdoor environments. The focus is on individuals and their personal responses to, and experiences of, outdoor environments.

Students focus on the characteristics of outdoor environments and different ways of understanding them, as well as the impact of humans on outdoor environments.

Students are required to take part in class based and extended practical activities, which usually include visiting places like the Alpine National Park, the Gippsland Lakes and other surrounding areas to complete a challenging multi-day hike, canoeing and other activities.

AREAS OF STUDY

Our place in outdoor environments

In this area of study students examine how humans connect with outdoor environments and why these connections are important.

Exploring outdoor environments

This area of study considers how our personal responses are influenced by media portrayals of outdoor environments and perceptions of risk involved in outdoor experiences.

Safe and sustainable participation in outdoor environments

With a focus on planning and participating in outdoor experiences, students develop practical skills and knowledge to participate safely and sustainably in outdoor experiences and use their experiences and observations as the basis for reflection and analysis of the key skills and knowledge.

Understanding outdoor environments

This area of study introduces students to a range of understandings and types of outdoor environments from range of perspective, and how these environments are managed. Students investigate the characteristics of a variety of outdoor environments, including those visited during practical outdoor experiences.

Observing impacts on outdoor environments

This area of study focuses on the human activities undertaken in outdoor environments and their impacts on those environments, both positive and negative.

Independent participation in outdoor environments

Students plan for their outdoor experience and peer lead that experience with their class. During the experience they will analyse the impacts of other users and themselves on the outdoor environment and investigate ways to reduce this and promote sustainable interactions.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways as:

- Outdoor or environmental educator
- Outdoor adventure guide
- Park ranger
- Natural resource management
- Teacher
- Environmental scientist
- Tour guide
- Land management
- Eco and adventure tourism.

OUTDOOR AND ENVIRONMENTAL STUDIES UNITS 3/4

OVERVIEW

Students are required to take part in class based and extended practical activities, which usually include visiting places like the Alpine National Park, the Gippsland Lakes and other surrounding areas to complete a challenging multi-day hike, canoeing and other activities.

The focus of this study is the ecological, historical, and social contexts of relationships between humans and outdoor environments in Australia. It examines the dynamic nature of relationships between humans and their environment over different time periods stretching back more than 60,000 years until the present.

Students explore the sustainable use and management of outdoor environments, and the crucial need to balance human needs with the needs of these environments.

AREAS OF STUDY

Changing human relationships with outdoor environments

Students examine the unique nature of Australian outdoor environments and investigate a range of human relationships with outdoor environments, from various Indigenous cultural experiences, through to the influence of several major historical events and issues after European settlement. A major hike is undertaken to see the interactions and impacts of these events. Students study the foundation and role of environmental and political movements in changing relationships with outdoor environments and the subsequent effects of these on environmental politics.

Relationships with Australian environments in the past decade

Students examine conflicting values of human use and relationships with outdoor environments in the past decade and how these are represented in various forms of media. Social, cultural, economic and political factors that influence these relationships are explored along with how these conflicts are resolved.

The importance of healthy outdoor environments

This area of study explores the current condition of outdoor environments in Australia and the importance of outdoor environments for individuals and society. Students examine the nature of sustainability and use observations to evaluate the health of outdoor environments. They investigate current and potential damage to outdoor environments and the subsequent impacts.

The future of outdoor environments

Students examine a range of land management practices and what individuals can do to sustain these environments now and into the future. Students consider how to balance human needs with conservation efforts and what skills are necessary to be environmentally responsible citizens. Students examine current laws and conventions and suggest ways to improve them for better conservation outcomes.

Investigating outdoor environments

Students focus on planning and participating in outdoor activities. Students reflect on practical activities to compare characteristics and environmental impacts observed at two different sites. A major element is the logbook observations completed while on practical activities, which will be the basis for a completion of a written report.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways as:

- Outdoor or environmental educator
- Outdoor adventure guide
- park ranger
- Natural resource management
- Teacher
- Environmental scientist
- Tour guide
- Land management
- Eco and adventure tourism.

SCIENCE

BIOLOGY UNITS 1/2

OVERVIEW

There are many challenges in keeping an organism alive and well. This course is designed to awaken the senses before attempting Unit 3 Biology. Students will dive into the inner workings of the cell and body systems, then establish an understanding of how the organism survives abiotic factors. Finally, students explore how the organism can survive and reproduce to pass on its genetic material and they will learn about some of the medical advances in stem cells and reproductive technologies. Students will also undertake an independent investigation and a research task to hone their skills of scientific methodology

AREAS OF STUDY

How do organisms function?

Students will explore the structure and functioning of cells and investigate key cellular processes and body systems that allow an organism to function.

How do living systems sustain life?

All organisms live in an environment that they are structurally, physiologically, and behaviourally adapted for. Students will explore how the adaptations of an organism contribute to its survival in an ecosystem.

How does reproduction maintain the continuity of life?

All life is derived by the division of cells. Students will look at this process and how genetic material via the process of asexual or sexual reproduction are passed on from one generation to the next.

How is inheritance explained?

Students will hone their genetic literacy and predict the likelihood of certain genes being carried on through multiple generations and focus on the ethical, social, and moral issues that will arise through genetic screening.

Research Project

Students will undertake research into a question about reproductive assistive technologies.

Practical Investigation

Students design and conduct a practical investigation into the survival of an individual or a species.

POSSIBLE FUTURE PATHWAYS

The study of Biology is part of the possible pathways to further study in science. The study of Biology can lead to pathways in:

- medicine
- veterinary science
- nursing
- research
- immunology.

Studying Biology also provides an opportunity for students to develop skills which are directly related to work-life, such as, communication, planning and organising, teamwork, problem-solving, self-management, taking initiative and using technology.

BIOLOGY UNITS 3/4

OVERVIEW

Life is beautiful! From genes to proteins, reproduction to growth, evolution to diversity, Biology is the study of living organisms, including their structure, function, growth, origin, and evolution. VCE Biology explores the dynamic relationships between organisms and their interactions with the non-living environment. Life, from the cellular to organism level will be explored and studied. Students will undertake guided and self-directed scientific research to develop competency in using and applying key science skills.

AREAS OF STUDY

What is the role of nucleic acids and proteins in maintaining life?

Gene regulation and the process of protein synthesis is explored. Students will also learn about DNA manipulation techniques and evaluate the social and ethical implications of these technologies.

How are biochemical pathways regulated?

Students focus on the structure and regulation of biochemical pathways. They examine how biochemical pathways, specifically photosynthesis and cellular respiration, involve many steps controlled by enzymes and assisted by coenzymes.

How do organisms respond to pathogens?

Students focus on the immune response of organisms to specific pathogens. They compare different ways that immunity may be acquired and evaluate challenges and strategies in the treatment of disease.

How are species related?

Students focus on the continual change and challenge life on Earth has faced. Students investigate the relatedness between species and the impact of various changes/events on a population's gene pool. Fossil evidence and DNA evidence is used to map the evolution of modern humans.

Practical Investigation

The students refine their Key Science Skills by undertaking an independent practical investigation.

POSSIBLE FUTURE PATHWAYS

The study of Biology is part of the possible pathways to further study in science. Biology-related careers are broad, including:

- medicine
- veterinary science
- nursing
- research
- immunology.

Studying biology also provides an opportunity for students to develop skills which are directly related to working life, such as communication, planning and organising, teamwork, problem-solving, self-management, taking initiative, and using technology.

CHEMISTRY UNITS 1/2

OVERVIEW

Everything is made of matter and chemistry is the study of matter. So, if you want to know about everything, then chemistry is for you! In Year 11 Chemistry students will investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials. Students will be introduced to quantitative concepts including the mole and use this to determine the relative masses of elements and the composition of substances. Water is studied in depth and students will have the opportunity to investigate solubility, concentration, pH, and reactions involving water. The students will also undertake a research investigation and a practical investigation.

AREAS OF STUDY

Unit 1: How can the diversity of materials be explained? How do the chemical structures of materials explain their properties and reactions?

Students focus on the nature of chemical elements, their atomic structure, type of bonding and their place in the periodic table. The model of the atom and the mole concept will be explored.

How are materials quantified and classified?

Students will investigate the mole theory, the chemistry and naming of organic compounds and polymers.

How can chemical principles be applied to create a more sustainable future?

Knowledge of structure and properties of matter. Students have the opportunity to investigate a question related to the development, use and/or modification of a selected material or chemical.

Unit 2: How do chemical reactions shape the natural world? How do chemicals interact with water?

Students will explore the properties of water and the reactions that take place with water, including acid-base and redox reactions.

How are chemicals measured and analysed?

Here the focus turns to quantification of chemical reactions including acids and bases, salts, and gases. Solubility and volumetric analysis are studied along with construction and balancing chemical equations (stoichiometry) and application of gas equations.

How do quantitative scientific investigations develop our understanding of chemical reactions?

Students will adapt or design and then conduct an experiment or investigation related to gases, acid-base, redox reactions, or the analysis of water. Quantitative data should be generated and used to reach a conclusion in response to their research question.

POSSIBLE FUTURE PATHWAYS

The study of Chemistry is part of the possible pathways to further study in science. Chemistry-related careers are broad, including:

- analytical chemist
- biotechnologist
- chemical engineer
- pharmacologist.

Studying chemistry also provides an opportunity for students to develop skills which are directly related to work-life such as communication, planning and organising teamwork, problem-solving, self-management, and the use of technology.

CHEMISTRY UNITS 3/4

OVERVIEW

The global demand for energy and materials is increasing as the world population increases. The study of chemistry is an important step to increasing the efficiency of our energy options and the production of materials.

Carbon is the basis for all life on Earth, but it is also found in fuels, food, and medicine. Students will study the ways in which organic (carbon-containing) structures are represented and named. They will also use their skills in analytical chemistry to determine the concentration of organic compounds in mixtures. The students will undertake a practical investigation related to energy or food.

AREAS OF STUDY

Unit 3 How can design and Innovation help to optimise chemical processes? What are the current and future options for supplying energy?

Students will compare fossil fuels and biofuels as energy sources for society, and carbohydrates, proteins, and lipids as fuel sources for the body. Combustion reactions, galvanic and fuel cells will be studied.

How can the rate and yield of a chemical reactions be optimised?

Students will apply rate and equilibrium principles to predict how the rate and extent of reactions can be optimised. They will use experimental techniques to investigate equilibrium and electrolysis and how this relates to secondary (re-chargeable) cells.

Unit 4 How are carbon-based compounds designed for purpose? How are organic compounds categorised and synthesised?

Students will compare the general structures and reactions of the major organic families of compounds. They will examine organic reaction pathways and apply them in the production of esters used as common food flavourings.

How are Organic compounds analysed and used?

Students will focus on laboratory and instrumental analysis of organic compounds as well as the function of some organic compounds as medicines.

How is scientific inquiry used to investigate the sustainable production of energy and/or materials?

Students design and undertake a practical investigation related to energy and/or food.

POSSIBLE FUTURE PATHWAYS

The study of Chemistry is part of the possible pathways to further study in science. Chemistry-related careers are broad, including:

- analytical chemist
- biotechnologist
- chemical engineer
- pharmacologist.

Studying chemistry also provides an opportunity for students to develop skills which are directly related to work-life, such as, communication; planning and organising; teamwork; problem-solving; self-management and the use of technology.

ENVIRONMENTAL SCIENCE UNITS 1/2

OVERVIEW

The Earth is fragile! In VCE Environmental Science students examine Earth as a set of four interacting systems: the atmosphere, biosphere, hydrosphere, and lithosphere. Students apply a systems perspective when exploring the physical requirements for life and consider the effects of natural and human-induced changes in ecosystems. They investigate the physical environment and its components, the function of local ecosystems and the interactions that occur. The concept of pollution is explored in detail and the associated impacts on Earth's four systems through global, national, and local perspectives.

AREAS OF STUDY

How is life sustained on Earth?

Students will compare the processes for obtaining the key inputs required for life on Earth and explain how Earth's four systems interact to sustain life.

How is Earth a dynamic system?

Students explore the flow of matter and energy, nutrient exchange, and environmental changes in ecosystems.

Practical investigation.

Students refine Key Science Skills by undertaking an independent practical investigation.

When does pollution become a hazard?

Students will compare a selected pollutant that results in bioaccumulation and explain how it can be measured and monitored.

What makes pollution management so complex?

Students will compare the sources, nature, transport mechanism, effects, and treatment of three selected pollutants.

Case study

Students will investigate and communicate a substantiated response to an issue involving the management of a selected pollutant of local interest.

POSSIBLE FUTURE PATHWAYS

The study of Environmental Science offers possible pathways to further study in science. Environmental careers are broad, including:

- environmental consultant
- environmental education officer
- environmental engineer
- marine biologist
- sustainability consultant.

Studying Environmental Science also provides an opportunity for students to develop skills which are directly related to work-life, such as, communication; planning and organising; teamwork; problem-solving; self-management; demonstrating initiative and the use and appreciation of technology.

ENVIRONMENTAL SCIENCE UNITS 3/4

OVERVIEW

The focus of Environmental Science at this level is environmental management through the examination and application of sustainability principles.

Management of the biosphere is explored and scientific principles in evaluating biodiversity management are applied. Students then analyse the social and environmental impacts of energy production and use. They explore the complexities of interacting systems of water, air, land and living organisms that influence climate, focusing on both local and global scales, and consider long-term consequences of energy production and use.

AREAS OF STUDY

Is maintaining biodiversity worth a sustained effort?

Students will learn about the importance of Earth's biodiversity, analyse the threats to biodiversity, and evaluate management strategies to maintain biodiversity in the context of one selected threatened endemic species.

When is development sustainable?

Students will explain the principles of sustainability and environmental management, select an environmental strategy to analyse and evaluate for effectiveness.

What is a sustainable mix of energy sources?

Students will compare the advantages and disadvantages of a range of energy sources, evaluate the sustainability of their use, and explain the impacts of their use on society and the environment.

Is climate predictable?

Students will explain the causes and effects of changes to Earth's climate, compare methods of measuring and monitoring atmospheric changes, and explain the impacts of atmospheric changes on living things and the environment.

Practical investigation

The students refine their Key Science Skills by undertaking an independent practical investigation

POSSIBLE FUTURE PATHWAYS

The study of Environmental Science is part of the possible pathways to further study in science. Environmental careers are broad, including:

- environmental consultant
- environmental education officer
- environmental engineer
- marine biologist
- sustainability consultant.

Studying Environmental Science also provides an opportunity for students to develop skills which are directly related to working life, such as, communication; planning and organising; teamwork; problem-solving; self-management; demonstrating initiative and the use and appreciation of technology.

PHYSICS UNITS 1/2

OVERVIEW

Physics is the study of the laws of nature - how and why things behave as they do. Physics investigations range from the microscopic world of elementary particles to the cosmological scale of the universe, from the properties of materials to the behaviour of living organisms. Physics is crucial to understanding the world around us, the world inside us, and the world beyond us. It challenges our imaginations and leads to great discoveries that change our lives. Physics also underpins many new technologies, cell phones, the Internet, and MRIs are only a few examples of the physics-based technological developments that have revolutionized our world. Students will have opportunities to explore questions related to the natural and constructed world and to engage in a range of inquiry tasks, applying physics principles and developing key science skills.

AREAS OF STUDY

How are light and heat explained? The students study light using the wave model and thermal energy using a particle model forming an understanding of the fundamental physics ideas of reflection, refraction, and dispersion. They use these to understand observations made of the world such as mirages and rainbows. They investigate energy transfers and explore how light and thermal energy relate to one another. They apply light ideas to explain how light is used through optical fibres in communication, and how physics is used to inform global warming and climate change.

How is energy from the nucleus utilised? Students build on their understanding of energy to explore energy that derives from the nuclei of atoms. They learn about the properties of the radiation from the nucleus and the effects of this radiation on human cells and tissues and apply this understanding to the use of radioisotopes in medical therapy. Students also explore the transfer of energy from the nucleus through the processes of fission, fusion, and radioactive decay.

How can electricity be used to transfer energy? Students develop conceptual models to analyse electrical phenomena and undertake practical investigations of circuit components. Concepts of electrical safety are developed through the study of safety mechanisms and the effect of current on humans. Students apply and critically assess mathematical models during experimental investigations of DC circuits. They explore electrical safety and the use of transducers to transfer energy in common devices.

How is motion understood? Students describe and analyse graphically, numerically, and algebraically the energy and motion of an object, using specific physics terminology and conventions. They consider the effects of balanced and unbalanced forces on motion and investigate the translational and rotational forces on static structures. Students apply mathematical models during experimental investigations of motion and apply their understanding of motion and force through a case study.

Options: Students choose one of eighteen topic options including climate change, fusion/fission comparison, aeronautics, structures and materials, biomechanics, electricity in human cells, radiation in medicine, music, optics, astrophysics, sound, and sports science.

Practical Investigation: Students undertake an independent practical investigation to refine their Key Science Skills.

POSSIBLE FUTURE PATHWAYS

The study of Physics a pathway to further studies in science. Physics-related careers are broad, including:

- accelerator operator
- astronomer
- engineer
- environmental scientist
- meteorologist
- physicist
- research analyst.

Studying Physics also provides opportunities to develop work-life skills such as, communication; planning and organising; teamwork; problem-solving; self-management and the use of technology.

PHYSICS UNITS 3/4

OVERVIEW

Physics is a natural science based on observations, experiments, measurements, and mathematical analysis with the purpose of finding quantitative explanations for phenomena occurring from the subatomic scale through to the planets, stellar systems, and galaxies in the Universe. In undertaking this study, students develop their understanding of the roles of careful and systematic experimentation and modelling in the development of theories and laws. They undertake practical activities and apply physics principles to explain and quantify both natural and constructed phenomena.

AREAS OF STUDY

How do physicists explain motion in two dimensions?
Students use Newton's laws to analyse linear, circular, and projectile motion. They explore the motion of objects under the influence of a gravitational field and relationships between force, energy, and mass.

How do things move without contact?
Students will examine the similarities and differences between three fields: gravitational, electric, and magnetic and apply these concepts.

How are fields used in electricity generation?
The production, distribution and use of electricity have had a major impact on modern life. Students will use empirical evidence and various models to explain how electricity is produced and delivered to homes.

How has understanding about the physical world changed?
Students learn how understanding of light, matter and motion have changed over time. They explore how major experiments led to the development of theories to describe these fundamental aspects of the physical world.

How is scientific enquiry used to investigate fields, motion, or light? Practical Investigation
The students refine their Key Science Skills by undertaking an independent practical investigation.

POSSIBLE FUTURE PATHWAYS

The study of Physics offers possible pathways to further study in science. Physics-related careers are broad. Studying this subject can lead to pathways as:

- accelerator operator
- engineer
- research analyst
- astronomer
- meteorologist.

Studying Physics also provides opportunities to develop work-life skills such as, communication; planning and organising; teamwork; problem-solving; self-management and the use of technology.

PSYCHOLOGY UNITS 1/2

OVERVIEW

VCE Psychology is designed to enable students to explore the complex interactions between thought, emotions, and behaviour. Studying Psychology enables students to develop their capacity to think, question and analyse psychological research and critically reflect on the findings of experiments and research. They are encouraged to use their problem-solving skills to establish and articulate their understandings, and to think deeply and critically about their own lives, manage life circumstances and reach personal goals. This subject is designed to help students thrive in everyday situations, by improving their understanding of, and teaching strategies to improve, students' memory, sleep, mental health, and wellbeing, and understanding of how individuals and groups behave and develop.

AREAS OF STUDY

What influences psychological development?

Psychological development involves complex interactions between biological, psychological, and social factors. Students explore how these factors influence different aspects of a person's development, recognising that individuals are not fixed from birth but instead can grow and change psychologically across their lives.

How are mental processes and behaviour influenced by the brain?

Students develop their understanding of how different areas of the brain interact to enable the processing of complex sensory information, the initiation of voluntary movements, language, decision-making, and the regulation of emotions.

How does contemporary psychology conduct and validate psychological research?

Students investigate how science is used to explore and validate contemporary psychological research questions.

How are people influenced to behave in particular ways?

Students explore factors that shape the identity and behaviour of individuals and groups. Students explore the psychological impact of stereotypes, prejudice, discrimination and stigma on individuals and groups in Australian society, and investigate strategies to reduce prejudice, discrimination, and stigma.

What influences a person's perception of the world?

Students explore the influence of biological, psychological, and social factors on visual and taste perception. Perceptual distortions of vision and taste are explored when looking at the fallibility of perceptual systems.

How do scientific investigations develop understanding of influences on perception and behaviour?

In this area of study students adapt or design and then conduct a scientific investigation into the internal or external influences on perception and/or behaviour.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways in:

- psychology
- youth work
- community services
- human services and welfare
- sport and training
- market research
- nursing.

PSYCHOLOGY UNITS 3/4

OVERVIEW

Do you ever wonder why you think and feel the way you do? Do you want to discover what happens when you feel stressed, or maybe you want to be the person to cure degenerative disorders like Parkinson's and Alzheimer's? Are you interested in understanding the links between the criminal justice system and memory? What about learning more about the mysteries of sleep? Are interested in Mental Health? If you have answered yes to any or all the questions above, then Psychology Units 3 and 4 is for you! Psychology is the study of the development of the mind and behaviour including biological structures and processes that underpin both. Students can develop an understanding of themselves and their relationships with others through the study of Psychology.

AREAS OF STUDY

How does the nervous system enable psychological functioning?

The students will explore the remarkable role the Nervous System plays, in allowing us to respond to internal and external stimuli.

How do people learn and remember?

Students will investigate the neural basis and learning and memory. The factors that influence memory and the reliability of memory will be analysed, providing practical strategies to improve your own memory.

How does sleep affect mental processes and behaviour?

Students will investigate the importance of sleep, by exploring the impacts of sleep deprivation on human functioning. Strategies to improve sleep quality are learned, so it's another practical lesson that could improve your daily life!

What influences mental wellbeing?

Students will explore the concept of a mental health continuum and factors that explain how location on the continuum for an individual may vary over time. They will learn to apply a biopsychosocial approach to analyse mental health and mental disorder and learn strategies to maintain mental health.

Research Methods and Practical Investigation

Students refine their Key Science Skills by undertaking an independent practical investigation.

POSSIBLE FUTURE PATHWAYS

Psychology-related careers are broad. Studying this subject can lead to pathways in:

- counselling
- clinical psychology
- neuropsychology
- developmental psychology
- educational psychology
- health sciences
- sport sciences
- organisational psychology.

TECHNOLOGY

FOOD STUDIES UNITS 1/2

OVERVIEW

Students investigate the origins and roles of food through time and across the world. In Area of Study 1 students explore how humanity has historically sourced its food, examining the general progression from hunter-gatherer to rural-based agriculture, to today's urban living and global trade in food.

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

Students will also focus on commercial food production industries, and look at food production in small-scale domestic settings, as both a comparison and complement to commercial production. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers.

Students will also be expected to cook with and use food products that may contain allergens and animal products.

AREAS OF STUDY

Food around the world

This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world.

Food in Australia

In this area of study students focus on the history and culture of food in Australia. They look at indigenous food prior to European settlement and the attempts of the first non- indigenous settlers to establish a secure and sustainable food supply.

Food industries

In this area of study students focus on commercial food production in Australia, encompassing primary production and food processing and manufacturing, and the retail and food service sectors.

Food in the home

In this area of study students further explore food production, focusing on domestic and small-scale food production.

POSSIBLE FUTURE PATHWAYS

Food Studies provides a rich curriculum with a focus on nutrition, food choice, agriculture, the food industry, packaging and health and wellbeing.

The study of Food Studies Units 1 and 2 leads to the study of VCE Food Studies Units 3 and 4.

Studying this subject can lead to pathways in:

- health sciences
- nutrition
- food sciences.

FOOD STUDIES UNITS 3/4

OVERVIEW

Students explore the science of food and how it nourishes and sometimes harms our bodies. Students investigate the physiology of eating and appreciating food, as well as digestion. Students investigate functional properties of food and the changes that occur during food preparation and cooking.

Students analyse the scientific rationale behind the Australian Dietary Guidelines and the Australian Guide to Healthy Eating. They will focus on influences on food choices and enquire into the role of food in shaping and expressing identity and connectedness and the ways in which food information can be filtered and manipulated.

Students examine debates about global and Australian food systems and focus on issues about the environment, ethics, farming practices, the development and application of technologies, and the challenges of food security, food safety, food wastage, and the use and management of water and land.

Students study individual responses to food information and misinformation and the development of food knowledge, skills, and habits to empower consumers to make discerning food choices. Students consider how to assess information and draw evidence-based conclusions.

AREAS OF STUDY

The Science of Food

Students will learn about the processes of eating and digesting food and the absorption of macronutrients. They explore the causes and effects of food allergies, food intolerances and food contamination and analyse food selection models, such as The Australian Dietary Guidelines and the Australian Guide to Healthy eating and apply principles of nutrition and food science in the creation of food products throughout the practical lessons.

Food choice, health, and wellbeing

Students focus on patterns of eating in Australia and the influences on the food we eat. Students look at relationships between social factors and food access and choice, as well as the social and emotional roles of food in shaping and expressing identity. Students inquire into the role of media, technology, and advertising as influences on the formation of food habits and beliefs and investigate the principles of encouraging healthy food patterns in children.

Environment and Ethics

Students will focus on Australian and global food systems, relating to environmental issues, ethics, technologies, food access, food safety, and the use of agricultural resources.

Navigating Food Information

Students focus on food information and misinformation and the development of food knowledge, skills, and habits. Students learn to assess information and draw evidence- based conclusions to navigate contemporary food fads, trends, and diets. Students assess the credibility and reliability of the evidenced-based recommendations of the Australian Dietary Guidelines and produce food products in line with the Australian Guide to Healthy Eating.

Students are assessed through a variety of practical and written tasks.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways in:

- health and food sciences
- nutrition
- food sciences.

PRODUCT DESIGN AND TECHNOLOGY UNITS 1/2

OVERVIEW

Unit 1 focuses on the analysis, modification, and improvement of a product design with consideration of sustainability.

Students consider the sustainability of an existing product, such as the impact of sourcing materials, manufacture, distribution, use and likely disposal. They consider how a redeveloped product should attempt to solve a problem related to the original product. Where possible, materials and manufacturing processes used should be carefully selected to improve the overall sustainability of the redeveloped product.

In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including end-user/s' needs and wants; function, purpose, and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution.

AREAS OF STUDY

Sustainable Redevelopment of a Product

This area of study introduces students to the product design process, lifecycle analysis/assessment (LCA), IP and the product design factors, with an emphasis on sustainability. Students consider contemporary practices of designers who claim to incorporate sustainable practices.

Producing and Evaluating a Redeveloped Product

This area of study focuses on the implementation of the design and planning completed in Area of Study 1. Students refer to their working drawings and scheduled production plan and apply a range of techniques and processes safely to make a redeveloped product.

Designing within a Team

This area of study enables students to apply the product design process collaboratively and individually. Each student works in a design team to generate one design brief collaboratively from a scenario, based around a theme and contributes to the design, planning and production of a group product. Individual roles and responsibilities are allocated. Students develop evaluation criteria for the finished product to determine if each criterion has been met through testing and feedback.

Producing and Evaluating within a Team

In this area of study students apply knowledge, skills, techniques, and processes, including risk management, to make their product, designed in Area of Study 1, in accordance with the team requirements. To ensure consistency throughout production, the team refers to the historical or contemporary cultural design movement or style that inspired their designs. To facilitate communication, students may use digital and project management tools.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways in:

- product design
- sustainability
- fashion design
- construction management
- interior design industrial design
- building trades.

PRODUCT DESIGN AND TECHNOLOGY UNITS 3/4

OVERVIEW

In Unit 3 students are engaged in the design and development of a product that addresses a personal, local, or global problem (such as humanitarian issues), or that meets the needs and wants of a potential end-user/s. The product is developed through a design process and is influenced by a range of factors including the purpose, function, and context of the product; user-centred design; innovation and creativity; design elements and principles; sustainability concerns; economic limitations; legal responsibilities; material characteristics and properties; and technology

In Unit 4 students engage with an end-user/s to gain feedback throughout the process of production. Students make comparisons between similar products to help evaluate the success of a product in relation to a range of product design factors. The environmental, economic, and social impact of products throughout their life cycle can be analysed and evaluated with reference to the product design factors.

AREAS OF STUDY

Designing for End-users

Students examine the product design process and develop skills in writing a design brief, which is vital for the development of a viable solution. They focus on identifying and designing for a potential end-user/s of an intended product.

Product Development in Industry

This area of study focuses on the factors, processes and systems that influence the design and development of products within industrial settings. Students explore specific cases and the reasons why design and innovation are integral to value-adding to products. They also examine how companies react to market demands and technological developments.

Designing for Others

This area of study focuses on students working as designers and applying the product design process to meet the requirements of an end-user/s. Students identify specific needs of the end-user/s by referring to the product design factors and conducting research

Product Analysis and Comparison

In this area of study students examine design factors that influence the success of commercially available products. Products are analysed and evaluated in terms of the product design factors. Students develop an understanding of what people value and how they evaluate products using qualitative and quantitative methods and consider the impacts and consequences of product design success and failure.

Product Manufacture

This area of study focuses on the skills, production techniques and processes employed to make a product to suit the needs of an end-user/s. Students continue to implement their scheduled production plan, apply skills and processes including risk management in the safe use of materials, tools, equipment, and machines, and complete the product to specified standards of quality.

Product Evaluation

This area of study focuses on the student's application of evaluation criteria, the performance of checks and tests, and gaining end-user/s' feedback to determine how well a product meets the needs and requirements outlined in the design brief developed in Unit 3.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways in:

- product design
- fashion design
- construction management
- interior design
- industrial design.

SYSTEMS ENGINEERING UNITS 1/2

OVERVIEW

This study enables students to study fundamental mechanical and electrotechnical engineering principles, including the representation of mechanical and electrotechnical devices, the motions performed, the elementary applied physics, and the mathematical calculations that can be applied in order to define and explain the physical characteristics. Students apply their knowledge and construct functional systems.

AREAS OF STUDY

Mechanical systems

Students study fundamental mechanical engineering principles and the components required when producing an operational system. They learn how mechanisms and simple mechanical systems provide movement and mechanical advantage, and how the specific components of a system or an entire mechanical system can be represented diagrammatically. Using the systems engineering process students research, design and plan a mechanical system. They make a model or develop a prototype to test aspects of their design. They consider relevant factors that influence the creation and use of their system and document their findings and process.

Electro technological systems

Students focus on electro technological engineering principles and the components and materials that make operational electro technological systems. Using the systems engineering process, students will research, design, plan and model an operational electro technological system. They use a range of materials, tools, equipment, machines, and components and manage identified risks while producing their designed system. Using appropriate equipment, student also test the system and diagnose its performance, making necessary modifications and adjustments.

POSSIBLE FUTURE PATHWAYS

Possible links to VCE subjects leads to Systems Engineering Units 3 and 4.

Studying this subject can lead to pathways in:

- engineering
- design and manufacturing
- apprenticeships.

SYSTEMS ENGINEERING UNITS 3/4

OVERVIEW

Units 3 and 4 is the culmination of a student's study of Systems Engineering and presents the opportunity to apply principles and skills to design and manufacture one substantial controlled integrated system.

There is a strong emphasis on designing, manufacturing, testing and innovation. Students manage the project throughout all the phases of designing, planning, construction, and evaluation. Students further develop their understanding and interpretation of symbolic representation of technological systems.

AREAS OF STUDY

Integrated and controlled systems

Students learn about the integration, calibration, and control of mechanical and electro-technological systems, how they work and can be adjusted, as well as how their performance can be calculated and represented diagrammatically in a range of forms. Students use fundamental physics and applied mathematics to solve systems engineering problems. They apply theoretical concepts and principles and use the systems engineering process to manage the design and planning of an integrated and controlled system and to commence its production.

They gain an understanding of energy sources and the application of technologies to convert energy sources into power for engineered systems. They consider the relevance of designing systems that are beneficial to the economy, environment, and society.

Systems control

Students continue the development of the integrated and controlled system they have researched, designed, and planned. They support the production, testing, diagnosis and evaluation of their systems, subsystems, and use of components with appropriate documentation, and with reference to technical data. In their evaluation they refer to the systems engineering process and the factors that have influenced the creation and use of the system. They also consider improvements that could be made to both the system and the process.

Students focus on new or emerging systems engineering technologies and processes. They consider scientific, technological, environmental, economic, and societal and human factors that led to the development of the new or emerging technology and develop an understanding of how it operates and is used.

POSSIBLE FUTURE PATHWAYS

Studying this subject can lead to pathways in:

- engineering
- design and manufacturing
- apprenticeships.

VCE VOCATIONAL MAJOR

LITERACY

OVERVIEW

VCE Vocational Major Literacy focuses on the development of the knowledge and skills required to be literate in Australia today. The key knowledge and key skills encompass a student's ability to interpret and create texts that have purpose, and are accurate and effective, with confidence and fluency.

As students develop these skills, they engage with texts that encompass the everyday language of personal experience to the more abstract, specialised, and technical language of different workplaces, including the language of further study.

The applied learning approach of this study is intended to meet the needs of students with a wide range of abilities and aspirations.

AREAS OF STUDY

Unit 1: Literacy for Personal Use

This area of study focuses 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.

Unit 1: Understanding and creating digital texts

Students will develop their capacity to critically assess digital texts, including webpages for vocational and workplace settings, podcasts, and social media.

Unit 2 - Understanding issues and voices

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 in different vocational or workplace settings.

Unit 2: Responding to opinions

Students practise their use of persuasive language and participate in discussion of issues, either in print, orally or via a digital platform. Students consider their own perspectives on issues and develop reasoned and logical responses to these discussions in a respectful and thoughtful manner.

Unit 3: Accessing and understanding informational, organisational, and procedural texts

Students will become familiar with and develop confidence in understanding and accessing texts of an informational, organisational, or procedural nature. These texts should reflect real-life situations encountered by students and be representative of the sorts of texts students will encounter in a vocational setting or workplace, or for their health and participation in the community.

Unit 3: Creating and responding to organisational, informational, or procedural texts

This area of study focuses on texts about an individual's rights and responsibilities within organisations, workplaces, and vocational groups.

Unit 4: Understanding and engaging with literacy for advocacy

Students will investigate, analyse, and create content for the advocacy of self, a product, or a community group of the student's choice, in a vocational or recreational setting. Students will research the differences between texts used for formal and traditional types of advocacy, influence, and promotion, as well as some forms that are increasingly being used in the digital domain for publicity and exposure.

Unit 4: Speaking to advise or to advocate

Students will use their knowledge and understanding of language, context, and audience to complete an oral presentation that showcases their learning.

NUMERACY

OVERVIEW

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

This study allows students to explore the underpinning mathematical knowledge of number and quantity, measurement, shape, dimensions and directions, data and chance, the understanding and use of systems and processes, and mathematical relationships and thinking. This mathematical knowledge is then applied to tasks that are part of the students' daily routines and practices, but also extends to applications outside the immediate personal environment, such as the workplace and community.

The contexts are the starting point and the focus, and are framed in terms of personal, financial, civic, health, recreational and vocational classifications. These numeracies are developed using a problem-solving cycle with four components: formulating; acting on and using mathematics; evaluating and reflecting; and communicating and reporting.

UNITS OF STUDY

Unit 1

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

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 2

In Unit 2 students will develop and extend their numeracy practices to make sense of their personal, public, and vocational lives. They will develop mathematical skills with consideration of their local, community, national and global environments and contexts, and identification and appropriate selection and use of relevant technologies.

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 Unit 3 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.

These units provide students with a broad range of mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning, and community settings relevant to contemporary society.

The progression of learning is evident in Units 3 and 4 with the development of more complex numeracy and mathematical skills and knowledge, drawing on the knowledge gained from Units 1 and 2.

Unit 4

In Unit 4 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.

These units provide students with a broad range of mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning, and community settings relevant to contemporary society.

The progression of learning is evident in Units 3 and 4 with the development of more complex numeracy and mathematical skills and knowledge, drawing on the knowledge gained from Units 1 and 2.

WORK RELATED SKILLS

OVERVIEW

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

The study considers four key areas: the future of work; workplace skills and capabilities; industrial relations and the workplace environment and practice; and the development of a personal portfolio.

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

UNITS OF STUDY

Unit 1 - Careers and learning for the future

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. Students will investigate information relating to future employment, including entry-level pathways, emerging industries, and growth industries and trends, and evaluate the impact of pursuing employment in different industries. Students will reflect on this research in the context of their individual skills, capabilities, and education and/or employment goals. They will develop and apply strategies to communicate their findings.

Unit 2 - Workplace skills and capabilities

As the nature of work changes over time, so do the skills and capabilities needed for success. Fundamental to achieving personal goals relating to future education and employment is the ability to recognise and develop individual skills and capabilities that are valued in a chosen pathway. 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. Students will collect evidence and artefacts relating to their personal skills and capabilities and promote them through resumes, cover letters and interview preparation.

Unit 3 – Industrial relations, workplace environment and practice

This unit focuses on the core elements of a healthy, collaborative, inclusive and harmonious workplace. 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. They will investigate key areas relating to workplace relations including methods for determining pay and conditions, workplace bullying, workplace discrimination, workplace harassment and dispute resolution. Students will discover how teamwork and communication skills contribute to healthy, collegiate, and productive workplaces.

Unit 4 – Portfolio preparation and presentation

Portfolios are a practical and tangible way for a person to communicate relevant skills, experiences and capabilities to education providers and future employers. 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.

PERSONAL DEVELOPMENT SKILLS

OVERVIEW

VCE Vocational Major Personal Development Skills (PDS) takes an active approach to personal development, self-realisation, and citizenship by exploring interrelationships between individuals and communities. PDS focuses on health, wellbeing, community engagement and social sciences, and provides a framework through which students seek to understand and optimise their potential as individuals and as members of their community.

This study provides opportunities for students to explore influences on identity, set and achieve personal goals, interact positively with diverse communities, and identify and respond to challenges. Students will develop skills in self-knowledge and care, accessing reliable information, teamwork, and identifying their goals and future pathways.

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

Through self-reflection, independent research, critical and creative thinking and collaborative action, students will extend their capacity to understand and connect with the world they live in, and build their potential to be resilient, capable citizens.

UNITS OF STUDY

Unit 1 - Healthy individuals

This unit focuses on the development of personal identity and individual pathways to optimal health and wellbeing. It begins with concepts of personal identity and the range of factors that contribute to an individual's perception of self and individual health and wellbeing. Students will use these findings to enhance an understanding of community cohesion, community engagement and how sense of identity may affect outcomes in different contexts. 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 - Connecting with community

This unit focuses on the benefits of community participation and how people can work together effectively to achieve a shared goal. It begins with definitions of community and different types of communities at a local, national, and global level. Students will look at the relationships between active citizenship, empathy and connection to culture, and individual health and wellbeing. They will investigate the barriers and enablers to problem solving within the community.

Unit 3 - Leadership and teamwork

This unit considers the role of interpersonal skills and social awareness in different settings and contexts. 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. They will explore key components of effective teamwork and reflect on how to lead and contribute within a team context through a collaborative problem-solving activity. Students will evaluate individual contribution as well as the overall effectiveness of the team.

Unit 4 – Community project

This unit focuses on student participation in an extended project relating to a community issue. Students will identify environmental, cultural, economic, and social issues affecting the community and select one for an extended community project. They will look at past approaches to the selected issue in Australia and elsewhere, consider how they will research information, and formulate an objective to achieve. Students will reflect on how community awareness of a selected issue can be improved. Students will engage in a process of planning, implementing, and evaluating a response to a selected community issue.

VET CURRICULUM

CERTIFICATE II AGRICULTURE (Unit Code: AHC20122)

Provider: TAFE Gippsland	**Delivery:** TAFE Trade Centre	**TBC**
Completion: Full	**Duration:** 2 years	**Scored Assessment:** No
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Age 16 years +	**Structured Workplace Learning:** Strongly recommended	

OVERVIEW

This qualification is delivered face to face with scheduled practical skills days and field trips throughout the year. It is ideal for those who wish to start a career in the food and fibre industry, or further develop their skills and knowledge at the assistant farm hand level.

Through this course you will learn basic practical skills in fencing, monitoring water supplies, machinery operation, plant, and livestock management. Students undertaking this course will gain the practical skills and knowledge required to carry out routine tasks under general supervision within the agricultural industry.

Material costs include a branded uniform shirt which will be supplied.

EMPLOYMENT OPPORTUNITIES

- Farm hand, Stockperson
- Dairy tradesperson
- Agricultural traineeships or apprenticeships

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate or Diploma Agriculture
- Certificate III Dairy Production
- Certificate or Diploma in Horticulture

COMPLEMENTARY VCE SUBJECTS

- Biology
- Outdoor Education

CERTIFICATE II ANIMAL CARE (Unit Code: ACM20121)

Provider: TAFE Gippsland	**Delivery:** TAFE Bairnsdale	Friday 9.00 am to 3.00 pm
Completion: Full	**Duration:** 2 years	**Scored Assessment:** No
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Strongly recommended	

OVERVIEW

This qualification is delivered face to face with scheduled excursions over a 2-year period. It is a general qualification, for entry into sectors of the animal care and management industry where workers provide care for animals in workplaces such as animal shelters, kennels, catteries, sanctuaries, and veterinary clinics. This program assists students with a passion to work within the animal care sector and as an entry pathway to further study.

Students must have access to a minimum of two types of species of animals, for example a cat, dog, or bird. Material costs include a branded uniform shirt which will be supplied.

EMPLOYMENT OPPORTUNITIES

- Animal Care/Shelter Attendant
- Kennel Hand
- Pet retail shops
- Pet grooming services

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Companion Animal Services
- Certificate IV Veterinary Nursing
- Certificate III Equine
- Diploma of Animal Technology

COMPLEMENTARY VCE SUBJECTS

- Biology

CERTIFICATE II AUTOMOTIVE (Unit Code: AUR20720)

Provider: TAFE Gippsland	**Delivery:** TAFE Trade Centre Bairnsdale	**TBC**
Completion: Full	**Duration:** 2 years	**Scored Assessment:** No
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Strongly recommended	

OVERVIEW

A pre apprenticeship for students in the automotive industry will provide students with an overview of service and repair. Students will learn the fundamentals of automotive vehicles, how to service and repair minor faults on automotive vehicle engines, transmissions, suspensions, steering, brakes and electrical systems, and components. This course is also a valuable step towards gaining an apprenticeship in the automotive industry.

Materials costs include branded uniform shirt, safety glasses and ear protection which will be supplied.

Safety boots are required.

EMPLOYMENT OPPORTUNITIES

- Mechanic
- Vehicle Service Assistant
- Motor Sport Technician's Assistant
- Auto Electrician
- Spare Parts and Retail

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Automotive
- Certificate IV Automotive Studies
- Diploma of Automotive Studies
- Advanced Diploma of Automotive Studies
- Certificate III Heavy Commercial Vehicle Mechanical Technology
- Certificate III Light Commercial Vehicle Mechanical Technology

COMPLEMENTARY VCE SUBJECTS

- Systems Engineering
- Physics

CERTIFICATE II BUILDING AND CONSTRUCTION (CARPENTRY) PRE-APPRENTICESHIP
(Unit Code: 22614VIC)

Provider: TAFE Gippsland	**Delivery:** TAFE Gippsland Bairnsdale	TBC
Completion: Full	**Duration:** 2 years	**Scored Assessment:** Yes
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Strongly recommended	

OVERVIEW

This course provides learners with the basic skills required to work in the construction industry. The units include health and safety, safe use of hand and power tools, as well as practical tasks including the construction of a sawhorse and step ladder, building up to more skilled tasks including the construction of a cubby house. Communication skills and teamwork will build organisational skills and self-management in preparation for completion of a pre apprenticeship course providing a head start in gaining an apprenticeship in carpentry.

Safety boots required.

EMPLOYMENT OPPORTUNITIES

- Apprentice Carpenter
- Apprentice Builder
- Construction worker

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Carpentry (apprenticeship)
- Certificate IV Building and Construction

COMPLEMENTARY VCE SUBJECTS

- Product Design and Technology (Wood)
- Mathematics

CERTIFICATE III BUSINESS (Unit Code: BSB30120)

Provider: Integrity Business College	**Delivery:** Online	**Online:** Wednesday or Friday
Completion: Full	**Duration:** 2 years	**Scored Assessment:** No
VET in VCE: No	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Strongly recommended	

OVERVIEW

This course will provide a sound knowledge and skill base for your business and administration career. You will gain a broad range of skills which may include using computer applications, customer service, business documentation and human resources.

Individuals with this qualification would be able to work in a broad range of office roles and may provide technical advice and support to a team.

EMPLOYMENT OPPORTUNITIES

- Administration Officer
- Administrative Assistant
- Customer Service Assistant
- Human Resources Assistant

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate IV in Business
- Cert IV in Leadership and Management

COMPLEMENTARY VCE SUBJECTS

- English
- Business Management

CERTIFICATE II CIVIL CONSTRUCTION (Unit Code: RII20720)

Provider: TAFE Gippsland	**Delivery:** Bairnsdale Trade Centre	**Day:** Fridays 9.00 am to 2:45 pm
Completion: Full	**Duration:** 2 years	**Scored** Assessment: No
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Age 16 years +	Structured Workplace Learning: Strongly recommended	

OVERVIEW

This qualification is delivered on campus at the Bairnsdale Trade Centre with practical assessments and field trips throughout the year. This qualification provides students with an overview of working in an operational role in civil construction. Civil construction labourers assist tradespeople on construction sites by performing a wide range of manual labouring tasks such as excavating, taking measurements, reading plans, and using tools and equipment. This program also provides a pathway into further training as an apprentice or trainee within the civil construction industry.

EMPLOYMENT OPPORTUNITIES

- Civil plant operator
- Civil engineer

EDUCATION PATHWAYS

- Here are the next steps you could take in your education pathway:
- Certificate III Civil Construction
- Certificate III Civil Construction Plant Operations
- Certificate IV Civil Construction

SUBJECT CREDITS

Certificate II Civil Construction is completed over two years. On the successful completion of the first year of study, students are eligible for recognition for two VCE VET units at unit 1-2 level. On completion of the second year of the program students are eligible for a total (including year 11 units) of four VCE VET units on their VCE Statement of Results. Two of the VCE VET units are deemed to be at Unit 1-2 level and two are deemed to be at Unit 3-4 level.

CERTIFICATE II COMMUNITY SERVICES (Unit Code: CHC22015)

Provider: TAFE Gippsland	**Delivery:** TAFE Bairnsdale	Friday 9.00 am to 3.00 pm
Completion: Full	**Duration:** 2 years	**Scored Assessment:** No
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Yes	

OVERVIEW

In our community, there is a significant need for support to enhance the well-being of various groups including: the elderly, individuals with disabilities, and children in their formative years of learning. These sectors are expanding, offering promising career prospects and the chance to positively impact lives. You'll have the opportunity to cultivate skills and expertise in roles spanning aged care, individual support, and early childhood, allowing you to explore your preferred industry.

This course will give you credits into Community Services, Individual Support and Early Childhood.

EMPLOYMENT OPPORTUNITIES

- Early Childhood Educator
- Individual support
- Community services

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Early Childhood Education and Care
- Diploma of Individual Support

COMPLEMENTARY VCE SUBJECTS

- Physical Education
- Health and Human Development
- Biology

CERTIFICATE II COOKERY (Unit Code: SIT20421)

Provider: BSC	**Delivery**: BSC	**Day**: Timetabled
Completion: Full	**Duration**: 2 years	**Scored Assessment:** Yes
VET in VCE: Yes	**VCE VM Recognition**: Yes	**Block Credit**: Yes
Prerequisites: Nil	**Structured Workplace Learning:** Yes	

OVERVIEW

This qualification reflects the role of individuals working in kitchens who use a defined and limited range of food preparation and cookery skills to prepare food and menu items.

They are involved in mainly routine and repetitive tasks and work under direct supervision. This qualification does not meet the requirements for trade recognition as a cook, but can provide a pathway towards achieving that.

This qualification provides a pathway to work in kitchen operations in organisations such as restaurants, hotels, catering operations, clubs, pubs, cafes, and coffee shops; and institutions such as aged care facilities, hospitals, prisons, and schools.

EMPLOYMENT OPPORTUNITIES

- Traineeships or apprenticeships in Hospitality industry, (for example Chef, waiter)
- Traineeships or apprenticeships in Tourism industry

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate or Diploma in Hospitality.
- Certificate of Diploma in Commercial Cookery.

COMPLEMENTARY VCE SUBJECTS

- Food Studies

CERTIFICATE III EARLY CHILDHOOD EDUCATION AND CARE (Unit Code: CHC30121)

Provider: TAFE Gippsland	**Delivery**: TAFE Bairnsdale	**Day**: Fridays
Completion: Partial	**Duration**: 2 years	**Scored Assessment:** No
VET in VCE: Yes	**VCE VM Recognition**: Yes	**Block Credit**: Yes
Prerequisites: Nil	**Structured Workplace Learning:** Yes	

OVERVIEW

Do you enjoy working with children? With demand for childcare on the rise, gaining essential skills in this area will put you ahead of the pack. Build your confidence in face-to-face, practical classes and develop the in-demand skills required to work in this rewarding profession. You'll learn how to communicate with children and develop relationships through positive interactions, support their health, safety and wellbeing as well as your legal and ethical obligations.

A branded uniform shirt will be supplied

EMPLOYMENT OPPORTUNITIES

- Early Childhood Educator or Kindergarten Assistant
- Nanny
- Family Day Care
- Support worker

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Diploma of Early Childhood Education and Care
- Bachelor or Early Childhood Studies

COMPLEMENTARY VCE SUBJECTS

- Physical Education
- Health and Human Development
- Biology

CERTIFICATE II ELECTROTECHNOLOGY (CAREER START) (Unit Code: UEE22020)

Provider: AGA - Apprenticeships Group Australia	**Delivery:** AGA Bairnsdale	Thursday 9.00 am to 3.00pm
Completion: Full	**Duration:** 2 years	**Scored Assessment:** No
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Recommended	

OVERVIEW

This course provides the opportunity for those wishing to gain employment in the electro technology industry with the required prerequisite knowledge and skills to gain access to a wide range of apprenticeships offered within this industry. In particular, the course provides training in basic electrical theory, electrical workshop practices, wiring and basic installation skills, the use of hand and power tools and an overview of the electro technology industry and the range of occupations within it.

Safety boots are required.

EMPLOYMENT OPPORTUNITIES

- Electrical Engineering
- Electrician
- Communications Technician
- Transmission/Distribution Line Worker
- Fire Servicing Technician
- Security Technician
- Instrument Technician
- Refrigeration Mechanic

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Electro technology Electrician (apprenticeship)
- Certificate III Renewable Energy - ELV
- Certificate III Electronics and Communications
- Certificate III Computer Systems Equipment
- Electrical Apprenticeship

COMPLEMENTARY VCE SUBJECTS

- Physics
- Systems Engineering
- Maths Methods

CERTIFICATE II ENGINEERING STUDIES (METAL FABRICATION) (Unit Code: 22470VIC)

Provider: TAFE Gippsland	**Delivery:** TAFE Gippsland (SALE)	Thursday 8.00am to 3.15pm
Completion: Full	**Duration:** 2 years	**Scored Assessment:** Yes
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Strongly recommended	

OVERVIEW

This qualification will enable you to learn basic welding and fabrication of metal structures, while also learning basic fitting and turning including working from detailed drawings.

You will gain hand and power tools skills whilst undertaking practical tasks. This course is suited to learners looking o follow a career within the engineering industry.

Materials costs included Construction Induction Card and First Aid Qualification

Safety boots are required.

EMPLOYMENT OPPORTUNITIES

- Fitter and Turner
- Mechanical Fitter
- Welder
- Apprenticeships in metal manufacturing industries
- Maintenance Engineer
- Aircraft mechanic
- Vehicle body maker
- Panel beating

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Engineering (Fabrication Trade)
- Certificate III Marine Craft Construction
- Certificate III Jewellery Manufacture

COMPLEMENTARY VCE SUBJECTS

- Maths Methods
- Physics

HAIR AND BEAUTY SKILLS SET – incorporating CERT III BEAUTY SERVICES (SHB30115) and CERT II SALON ASSISTANT (SHB20216)

Provider: TAFE Gippsland	**Delivery:** TAFE Bairnsdale	Friday 9.00 am to 3.00 pm
Completion: Partial	**Duration:** 2 years	**Scored Assessment:** No
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Strongly recommended	

OVERVIEW

Dreaming of a career in the hair and beauty industry but can't decide which course is right for you? Or maybe you have a passion for hairstyling and makeup and would love to see what a career within the industry would be like? This skill set has been designed for you!

These skills include 17 units from the hairdressing and beauty training package to offer as a two-year VET DSS program, focussing on practical skills, hands on learning, and industry experiences.

Students will get to create a hair and makeup look for a professional photoshoot, they will listen to guest speakers, salon owners and senior stylists who will share their insight and knowledge on how you can have a successful career in the hair and beauty industry.

Product and equipment sessions with educators from Kryolan make-up, GHD styling, NAK haircare and Lish nails - including access to special student discounted pricing.

Materials costs includes uniform tunic + makeup, brush set, and classroom product and materials which will be supplied

EMPLOYMENT OPPORTUNITIES

- Beauty therapist
- Hairdresser
- Salon Assistant
- Makeup Artist

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate II Salon Assistant (7 credits)
- Certificate II Hairdressing (7 credits)
- Certificate II Retail Cosmetics (7 credits)

COMPLEMENTARY VCE SUBJECTS

- Art
- Business Management
- Studio Arts

CERTIFICATE III HEALTH SERVICES ASSISTANCE (Unit Code: HLT33115)

Provider: TAFE Gippsland	**Delivery:** TAFE Bairnsdale	**Friday** 9.00 am to 3.00 pm
Completion: Full	**Duration:** 2 years	**Scored Assessment:** Yes
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Yes	

OVERVIEW

This qualification serves as an excellent starting point for individuals aspiring to enter the healthcare field. Emphasis will be placed on effective communication techniques necessary for interacting in these professional settings. This course consists of theoretical and hands-on learning tasks. Practical sessions will be conducted on campus, in a simulated laboratory to enhance student learning. This qualification does not require any placement component. This course will give students credit into the Certificate III in Individual Support, Certificate III in Aged Care and Certificate IV in Allied Health Assistance.

EMPLOYMENT OPPORTUNITIES

- Allied Health Assistant
- Therapy Assistant
- Podiatry asst (may require further training)
- Physiotherapy asst (may require further training)
- Speech pathology asst (may require further training)
- Occupational therapy asst (may require further training)
- Nursing (will require further training)

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Allied Health Assistance
- Certificate IV Allied Health Assistance
- Diploma of Nursing
- Bachelor of Nursing
- Bachelor of Paramedicine

COMPLEMENTARY VCE SUBJECTS

- Health and Human Development
- Psychology

CERTIFICATE II HORTICULTURE (Unit Code: AHC20422)

Provider: TAFE Gippsland	**Delivery:** TAFE Bairnsdale Trade Centre	Friday 9.00 am to3.00 pm
Completion: Full	**Duration:** 2 years	**Scored Assessment:** No
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Strongly recommended	

OVERVIEW

If you enjoy taking a hands-on approach to learning, a Certificate II Horticulture can take you where you want to go. This exciting qualification will take you outdoors where you will develop and practice skills in machinery operation, plant growth, soils, diseases, and pests. You'll create and maintain garden beds and learn vital nursery and orchard skills. Experience all that the horticultural industry has to offer in a fun and practical way.

Materials costs include branded uniform shirt, safety glasses and ear protection, which will be supplied.

EMPLOYMENT OPPORTUNITIES

- Horticulturalist
- Gardener
- Nursery worker

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Horticulture
- Certificate III Conservation and Land Management
- Certificate IV Horticulture

COMPLEMENTARY VCE SUBJECTS

- Environmental Studies

CERTIFICATE III INFORMATION TECHNOLOGY (Unit Code: ICT30120)

Provider: BSC	**Delivery**: BSC	Timetabled
Completion: Full	**Duration**: 2 years	**Scored Assessment:** Yes
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Not compulsory	

OVERVIEW

This qualification provides the skills and knowledge for an individual to be competent in a wide range of general information and communications technology (ICT) technical functions, and to achieve a degree of self-sufficiency as an advanced ICT user. This course can be delivered as both part of a traineeship or as a non-trainee.

EMPLOYMENT OPPORTUNITIES

- Network administrator
- Further study leading to computer systems, games design, engineering, and telecommunications

EDUCATION PATHWAYS

- The next steps in your education pathway can include:
- Certificate IV in IT Networking
- Diploma in IT and/or the Cisco CCNA program or VMWare

COMPLEMENTARY VCE SUBJECTS

- Informatics
- Mathematics

CERTIFICATE II PLUMBING, PRE-APPRENTICESHIP (Unit Code: 22569VIC)

Provider: TAFE Gippsland	**Delivery:** TAFE @ AGA Bairnsdale	Friday 9.00 am to 3.00 pm
Completion: Full	**Duration:** 2 years	**Scored Assessment:** No
VET in VCE: Yes	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Strongly recommended	

OVERVIEW

The Certificate II Plumbing pre-apprenticeship prepares students with the skills and knowledge for entry into an apprenticeship in Certificate III Plumbing. This qualification offers a range of units including working safely as part of a team, measurements and calculations, basic terminology, reading plans and specifications, plumbing tools and equipment, basic welding and fixtures and fittings. This qualification also provides credits into an apprenticeship. Materials cost includes branded uniform shirt, safety glasses, gloves and ear protection which will be supplied

EMPLOYMENT OPPORTUNITIES

- Plumber
- Gasfitter
- Refrigeration mechanic

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Plumbing (Apprenticeship)
- Certificate IV Plumbing and services

COMPLEMENTARY VCE SUBJECTS

- Business Management
- English
- Further Mathematics

CERTIFICATE II SPORT AND RECREATION (Unit Code: SIS20122)
CERTIFICATE III SPORT, AQUATICS AND RECREATION (Unit Code: SIS30122)

Provider: Saville	**Delivery:** BSC	**Day:** Timetabled
Completion: Full	**Duration:** 2 years	**Scored Assessment:** Yes
VET in VCE: Yes	**VCE VM Recognition:** Yes+	**Block Credit**: Yes
Prerequisites: Nil	**Structured Workplace Learning:** recommended	

OVERVIEW

This qualification is delivered on campus at Bairnsdale Secondary College. This qualification reflects the multi-skilled role of individuals in operational and customer support positions in the sport or community recreation industry. These individuals are competent in a range of activities and functions requiring autonomous work within a defined range of situations and environments.

They work in locations such as fitness centres, sporting grounds or complexes, leisure and aquatic centres and community recreation centres.

EMPLOYMENT OPPORTUNITIES

- Recreation officer
- Activity operation officer
- Sport and recreation attendant
- Community activities officer
- Leisure services officer

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Fitness
- Diploma of Sport
- Bachelor of Education

COMPLEMENTARY VCE SUBJECTS

- Outdoor Education
- Physical Education
- Health Education

CERTIFICATE II WORKPLACE SKILLS (Unit Code: BSB20120)

Provider: Integrity Business College	**Delivery:** Online	**Online:** Wednesday or Friday
Completion: Full	**Duration:** 1 year	**Scored Assessment:** No
VET in VCE: No	**VCE VM Recognition:** Yes	**Block Credit:** Yes
Prerequisites: Nil	**Structured Workplace Learning:** Strongly recommended	

OVERVIEW

With this course students will be prepared for the professional world. They will receive guidance on creating appropriate resumes and cover letters and learn skills relating to customer service, workplace health and safety, time management, effective communication, and proficiency in basic office computer applications.

Individuals with this qualification would have a possible employment outcome of an Administration officer or Administrative Assistant

EMPLOYMENT OPPORTUNITIES

- Administration Officer
- Administrative Assistant

EDUCATION PATHWAYS

The next steps in your education pathway can include:

- Certificate III Business
- Certificate III Information Technology

COMPLEMENTARY VCE SUBJECTS

- English
- IT
- Business Management

Bairnsdale SECONDARY COLLEGE

Respect, Responsibility, Resilience

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