



Echuca  
College

DIVERSITY  
STRENGTH

2020

Year 10-12  
Course  
Selection  
Handbook

## **COLLEGE PROFILE**

At Echuca College we get to know our students as individuals so that we can focus on their development as resilient and responsible young adults destined for success in a constantly evolving world. Our College is focused on 'Preparation for the Future, Today'.

The friendly and supportive learning environment at Echuca College is underpinned by clear expectations, a strong code of conduct and a compulsory uniform policy. The framework for our positive environment is strengthened by Houses working in specific neighbourhoods and being supported by a team of experienced House leaders and well-being leading teachers. The high standard of education delivered in all areas of the College is a tribute to the dedication, intellect and empathy of our teaching and support staff- all whom take collective pride and inspiration from our students.

Echuca College is large enough to provide a comprehensive curriculum and a range of programs and resources second to none in this area to meet the most fastidious of students. Echuca College is also small enough to achieve the closeness which allows students and staff to develop ongoing educational relationships in friendly and supportive learning neighbourhoods. Innovative teaching programs and staff commitment to ongoing professional learning will ensure that Echuca College will deliver an exceptional and fulfilling educational experience for every student now, and in the future.

The essentials of English and Mathematics (the gate keepers of learning) prepare all students for the challenges of every preferred pathway. Equally, every student will have satisfaction and success in extensive encounters with Science, Humanities, the Arts, Technology, Languages and Health and Physical Education throughout their early years.

Our Learning Neighbourhoods and flexible learning spaces in Maths/Science, Technology and Visual Performing Arts have been designed to enable students and teachers to work more collaboratively. Students have great individualised tuition and this is promoted through the provision of 'state of the art' technology.

Whilst the majority of students come from the immediate rural cities of Echuca-Moama, approximately 30% travel along 20+ bus routes, some travelling an hour each way to access the education provided. The strong support and collaboration of our partner primary schools have ensured a seamless transition program for junior students to secondary education.





## Our Vision

Students at Echuca College are inspired and supported to achieve their best and develop the skills required to meet the challenges of an ever changing world in a caring learning environment.

## Our Values - PRIDE

- **PROGRESSIVE** - We continually evaluate and evolve to meet future needs of the students and the community
- **RESPECT** - We value and honour each other's rights, property and environment.
- **INCLUSIVE** - We ensure everyone has an opportunity to succeed, be safe and welcomed. We accept and recognise all values and strengths. We accept our differences, to build a strong community.
- **DEDICATED** - We are committed to personal goals and to achieving our personal best.
- **EXCELLENCE** - We are committed to improvement. We demonstrate excellence in our appearance, in our actions, in our communication and in always doing our personal best.

## What our students say about our school

"A school that does not discriminate, moves forward and allows staff and students to achieve their personal best. Everyone in this school is equal, respectful and capable of excellence."

"It is a school of students and staff all striving to achieve their personal best in all areas not just while supporting the people around them."

"PRIDE is the action for all students and staff to take that will bring out the best in them and others around them."

"Everyone gets a say. A school that feels proud. They all get included and all have a go. Echuca College pride shows that everyone tries their personal best."

"It is where everyone gets a say and that we help each other out and also to try our best for yourself and others."

"Everyone at Echuca College working together to achieve and strive to be their best, assisting in the development of each other and ourselves while respecting and including everyone no matter what their faiths, beliefs and opinions are. Accepting a more active role in our learning and development."

## VCE INFORMATION (VICTORIAN CERTIFICATE OF EDUCATION)

VCE stands for the Victorian Certificate of Education. The Victorian Curriculum and Assessment Authority (VCAA) administers this certificate. Details of the rules and procedures are available in a range of documents and can be obtained from the school or from the VCAA's website [www.vcaa.vic.edu.au](http://www.vcaa.vic.edu.au). The VCE is intended as a two year course of study although it can be completed over a longer period of time. Students at Echuca College study 12 units in year 11 (6 units per semester) and 10 units in year 12 (5 units per semester).

## VCE INFORMATION (VICTORIAN CERTIFICATE OF EDUCATION)

---

### VCE Graduation Requirements

The following rules for satisfactory completion of the VCE will apply from 2018:

To satisfactorily complete the VCE a student must have a satisfactory result (S) for a minimum of 16 units. This must include:

- at least three units from the English Group, two of which must be a Unit 3–4 sequence
- an additional three Unit 3–4 sequences of studies other than English, which may include any number of English sequences once the English requirement has been met.

### Tertiary Entrance Requirements

To satisfy VTAC requirements the following must be completed:

- A minimum of 16 units must be satisfactorily completed, including a sequence of Unit 3 & 4 from the English group.
- A sequence of VCE/VET Units 3 & 4 in three studies apart from the English requirement.
- Prerequisite requirements set by each Tertiary Institute.

### Learning Outcomes

Each VCE unit has a set of two to four outcomes, these outcomes must be achieved for the satisfactory completion of the unit. Achievement of the outcomes is based on the teacher's assessment of the student's performance on assessment tasks designed for the unit.

A student may be granted satisfactory completion of a unit if:

- The work meets the required standard.
- College deadlines have been met (extensions may be applied for in certain circumstances).
- The work can be authenticated.
- Rules have not been breached, including attendance rules.

### Assessment

Failure to meet deadlines set by the school may result in an 'N' (not satisfactory) for the unit regardless of whether the outcomes have been satisfactorily met. Satisfactory completion of each unit is based on a decision that the student has demonstrated achievement of a set of outcomes specified for the unit.

## VCAL INFORMATION (VICTORIAN CERTIFICATE OF APPLIED LEARNING)

---

The Victorian Certificate of Applied Learning [VCAL] is an applied learning option offered at the College. The VCAL provides the opportunity to build personal skills important for life and work, including literacy and numeracy skills, as well as practical work related experience via **structured workplace learning** for employability skills. It has a vocational focus.

Students who choose to do VCAL are more likely to be interested in going on to training at TAFE, an apprenticeship, or getting a job after completing school. VCAL does NOT mean a student cannot go to University. VCAL completed at the Senior level is accepted by some universities for admission—but there is no guarantee.

Students considering a VCAL program must do **12** units at Year 11 and Year 12 students must do **10** units that cover the 4 strands of VCAL:

- Year 11-Unit 1 and 2 Foundation English and Foundation Maths or General Maths
- Year 12 VCAL Literacy and Numeracy or VCE English or VCE Further Maths
- Subjects from VCE
- Personal Development
- VETis certificates

### All students:

- **are to do Work Placement**
- **must do at least one VCAL Personal Development unit at the Certificate level**
- **must do a VET Certificate or be enrolled in an ASBA (by the end of March)**
- **must complete a Literacy unit at the certificate level in which they are enrolled**
- **must complete a unit in Numeracy or Mathematics**

<b>VCAL STRAND</b>	<b>POSSIBLE UNITS</b>
<b>Literacy</b>	VCE English Any Senior VCAL Literacy units
<b>Numeracy</b>	Senior VCAL Numeracy units VCE Mathematics Any
<b>Work Related Skills</b>	Outdoor and Environment Units, Technology units, any VET Certificates
<b>Industry Specific Skills</b>	VET Certificates Australian School Based Apprenticeship (ASBA)
<b>Personal Development</b>	Intermediate VCAL Personal Development units Senior VCAL Personal Development units

## **VETis INFORMATION (VOCATIONAL EDUCATION AND TRAINING IN SCHOOLS)**

**In 2020 all VETis certificates will be offered within the Echuca College VCE selection blocks. This means that VET classes will be taught across the week just like any other VCE subject. There will be no additional fees to undertake a VET certificate at Echuca College. Students may select multiple VET certificates over a two/ three year period.**

VETis provides additional breadth to the traditional programs available, and it gives students the opportunity, before leaving school, to obtain a nationally recognised training credential endorsed by industry. Students can choose a VETis program as part of the VCE/VCAL course. A VETis program offers a vocational certificate with VCE credit built in, just like other VCE studies. VCE VET programs will give credits at Units 1-4. This means that a student would undertake training in a specific vocational area.

As part of their training students will complete structured workplace learning, this can be between **10 & 30 days over the 2 year program**, depending on the certificate that is chosen. The structured workplace learning will provide students with the opportunity to put their knowledge and skills into practice. This training will contribute towards satisfactory completion of the VCE/VCAL and the student will be awarded with a nationally recognised vocational qualification. The vocational qualification will provide students with access to further training, for instance at a TAFE institute, and may improve their chances of getting work after school.

### **VETis Certificate courses will be offered in the following areas:**

- Certificate II in Automotive Studies
- Certificate II in Building and Construction [Pre-Apprenticeship]
- Certificate III in Children Services\*
- Certificate II in Hospitality (Kitchen Operations)\*
- Certificate III in Music \*
- Certificate III Sport and Recreation
- Certificate III in Health Services Assistance
- Certificate II in Applied Languages (Indonesian)
- Certificate III in Information, Digital Media and Technology\*

A pre-apprenticeship is a nationally recognised qualification that has an automatic training and duration credit into the apprenticeship in the same industry area. A pre-apprenticeship training program prepares the student for entry into a trade- based apprenticeship by equipping the student with foundation knowledge and skills.

Formal pre-apprenticeship arrangements have been approved by Skills Victoria 21844VIC Certificate II in Building and Construction and 22015VIC Certificate II in Automotive Studies (pre-vocational).

### **Reasons to consider a Vocational Education Course**

- Students can graduate with 2 Certificates (VETis Certificate & VCE or VCAL).
- A majority of the VETis Certificates have a Unit 3/4 scored assessment (these are marked with \*) which can be counted towards a student's ATAR.
- Students do work placements which means that they are getting experience that employers may consider in the employment selection process.
- They are designed to help a student prepare for employment if they don't want to continue their education after Year 12, or may help them to choose a career pathway.
- Students should speak to the Pathways Manager.

## **ASBA (AUSTRALIAN SCHOOL BASED APPRENTICESHIP)**

---

Some students know what they would like to do in the way of a career after leaving school. A student can apply for an Australian School Based Apprenticeship program as part of their subject selection in Years 10, 11 & 12. As ASBA's are completed over 2 years it is preferred that students start in Years 10 or 11.

A School Based Apprenticeship and Traineeship offers students enrolled in the Victorian Certificate of Education (VCE) or the Victorian Certificate of Applied Learning (VCAL) the option of combining part-time employment, school and training. The program is undertaken under a training contract with an employer, has a training plan signed by the school and RTO which is formally registered with Skills Victoria and leads to a nationally recognised qualification at Certificate II, III or IV level.

A Registered Training Organisation provides learning modules, the employer provides 1000 hour of work placement over 2 years which usually means one day per week on the job (students must undertake at least 7 hours of employment and 6 hours of training per week) and the remaining four days are at the College completing VCE/VCAL units.

School Based Apprenticeship and Traineeship programs generally provide the same contribution to the VCE as their related VET in the VCE programs. Many school based apprentices and trainees move on to a full-time contract with their employer after leaving school, while others choose to continue their education and training at TAFE or university.

School Based Apprenticeships and Traineeships in the following industry areas have been approved by industry bodies and the VCAA for students undertaking VCE:

Agriculture; Automotive; Business; Community Services; Engineering; Food Processing (Wine); Horticulture; Hospitality; Information Technology; Sport and Recreation.

School Based Apprenticeships and Traineeships in other approved industry areas, may also contribute to the VCE through Block Credit Recognition.

### **An ASBA:**

- Means flexible training and experience in the workforce and a nationally recognised qualification while still studying at school.
- Enables students to finish Years 11 and 12 while starting their apprenticeship.
- Means students are paid a training wage or apprentice wage for the time they spend 'on-the-job' with their employer.
- Ensures students are covered by a training contract, which links to an industrial award or agreement.
- Improves educational and vocational pathways beyond school.

## **EXTRA CURRICULA PROGRAMS FOR STUDENTS IN YEARS 10-12**

---

The College offers a range of extra curricula activities that aim to meet students' interest as well as adding additional breadth to their experience at Echuca College. Some of the extra curricula activities available to Year 10, 11 and 12 students include:

- Debating competitions
- Echuca College Governing Council
- After School Homework Program
- Wellbeing Focus Day
- House competitions
- A vast number of sporting teams
- Camps – Year level
- Instrumental Music Program
- Student Exchange programs
- Mathematics and Science Competitions
- Dance performances
- Varied lunch time activities

## A FINAL CHECK FOR CHOOSING UNITS

### A student should:

- Choose units that interest them and in which they believe they will have success
- Take advantage of VCE Unit 1 & 2, VET, and ASBA programs in Year 10.
- Choose prerequisites for further training or tertiary courses that they are considering
- Select units that lead to employment or a vocation they find appealing
- Select units that they have researched, discussed with staff and feel confident they can complete
- Consider the opportunity to undertake dual courses VET/VCE/VCAL.

### Students should not choose units because:

- Their friends are doing them
- They think they are an easy option

## YEAR 10 CURRICULUM OVERVIEW

All core subjects are studied for 5 periods per week.

- Core – Full Year Units, English and Mathematics
- Semi Core - Semester Units, VET Public Safety/Health
- Elective Units – 7 Units during the year

### Year 10 Sample Program

English	Maths Elective	VET Public Safety/Health	Year 10 Elective	Year 10 Elective	Yr.10 Elective or VCE Unit or VET
English	Maths Elective	Year 10 Elective	Year 10 Elective	Year 10 Elective	Yr.10 Elective or VCE Unit Or VET

Public Safety and Health is centred on delivering outcomes related to increasing on student engagement with community and developing life skills.

**Students should remember to choose a balanced course taking into account their planned VCE/VCAL programs in Year 11 and 12.**

### Access to Advanced Studies in Year 10

Although most students begin their VCE studies in Year 11, some are quite capable of completing a VCE unit in Year 10. All students at Echuca College will be enrolled in VET Public Safety as part of their Year 10 program, this program will count as a unit towards the students VCE certificate. Many students will elect to undertake two more VCE units or to commence a VET or an ASBA Certificate.

In order for a Year 10 student to advance to a VCE Unit 1 & 2 program the student must have satisfactorily completed year 9 and meet the following selection criteria:

- Have the support of their parents/guardians in seeking VCE studies.
- Have undertaken counselling involving a Pathways Co-ordinator.
- Obtain a recommendation from their relevant Year Level Team Leader.

**Year 10 students may choose to undertake a Vocational Education and Training (VET) or an Australian School Based Apprenticeship (ASBA) as part of their program. See page 7& 8 for further information.**

We aim to develop confident and informed young adults who are socially responsible and prepared for further learning and the workplace.

## YEAR 11 & 12 CURRICULUM OVERVIEW

### Sample VCE Program

Year 11 Semester 1	English Study	Elective Unit 1	Elective Unit 1	Elective Unit 1	Elective Unit 1	Elective/VET/ASBA
Year 11 Semester 2	English Study	Elective Unit 2	Elective Unit 2	Elective Unit 2	Elective Unit 2	Elective/VET/ASBA
Year 12 Semester 1	English Study	Elective Unit 3	Elective Unit 3	Elective Unit 3	Elective Unit 3	Private Study
Year 12 Semester 2	English Study	Elective Unit 4	Elective Unit 4	Elective Unit 4	Elective Unit 4	Private Study

### Unit 1 & 2 School-Assessed Coursework (SACs)

A SAC is a specific piece of work, which is to be graded and is used for reporting purposes. This may be a test, model, writing folio, research project etc. Assessment tasks are set to determine achievement of outcomes and levels of performance at Unit 1 & 2 level.

### Unit 3 & 4 School-Assessed Coursework (SACs)

School-assessed coursework consists up of a number of assessment tasks that are specified in the study design. These assessment tasks are used to assess the learning outcomes.

To ensure that school's assessments of coursework in each study are comparable throughout the State, schools' coursework assessments are statistically moderated by VCAA, using the examination results in that study. VCAA issue final grades for all coursework assessments in December each year.

### Unit 3 & 4 School-Assessed Tasks (SATs)

A small number of studies will have school-assessed tasks. These will be used in studies where products and models are assessed. Art, Design and Technology, Food and Technology, Media Studies, Studio Art, Systems Engineering and Visual Communication and Design have SATs. These generally take a number of weeks to complete.

### Examinations

Examinations are held in November. Oral and Performance examinations are during October.

All students studying a Unit 3 & 4 sequence are also required to sit the General Achievement Test (GAT). The GAT scores are used by the VCAA to check that grades given by teachers for school assessed coursework and tasks are in the expected range.

### Study Scores

A student's overall achievement for each study will be calculated and reported as a Study Score (Relative Position) on a scale of 1-50. In order to achieve a study score a student must achieve an S for both Units 3 & 4.

### Australian Tertiary Admission (ATAR)

An ATAR is used by most tertiary institutions to determine who will be made an offer to study with them. The ATAR is composed of the marks gained in level 3 and 4 units. An ATAR generally includes the score in English or Literature, plus the **next best 3 studies**, plus 10% of the 5<sup>th</sup> and 10% of the 6<sup>th</sup> study. This calculation includes both VCE and VET courses.

### Victorian Curriculum and Assessment Authority (VCAA) Reporting

At the completion of the VCE, which usually takes two years, the VCAA issues each student the following reports:

- A VCE Certificate, indicating that VCE requirements have been met
- A statement of results showing S or N and appropriate Coursework Assessment grades for all sequences of 3 / 4 units attempted
- A study score (relative position) for each subject
- A statement of results from the GAT

At completion of the VCAL each student receives:

- A VCAL Certificate indicating the level of attainment
- A statement of results from the GAT
- A statement of results showing S or N and appropriate Coursework Assessment grades for all sequences of 3 / 4 units attempted

### Promotion

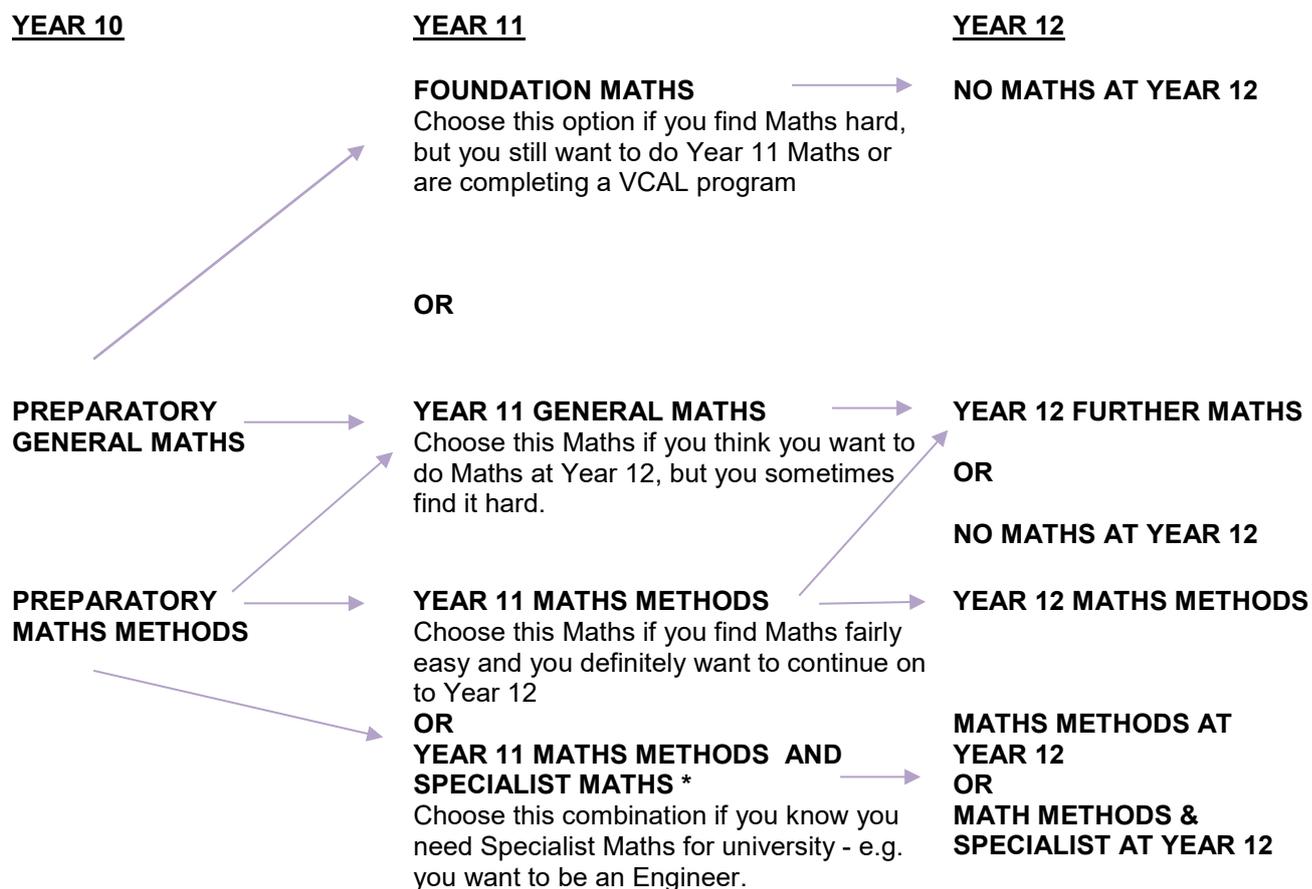
Students who do not meet the required standards for Year 10 will have their performance reviewed by the Student Wellbeing Team Leaders.

Promotion will only be granted where it is established that the student has the ability to experience success in the Year 10/ VCE program provided by Echuca College and have demonstrated a willingness to adopt more productive work habits.

## A GUIDE TO MATHEMATICS PATHWAYS

These are the most common pathways.

Other possibilities should be discussed with your Math's teacher.



\* If wishing to study Specialist Maths at Year 12 it is preferable to have completed Year 11 Specialist Maths (Unit 1 & 2)

# Year 10 Subject Outlines

## ENGLISH

### ENGLISH

---

#### Course Content

At Year 10 students continue to practise, consolidate and extend what they have learned from previous levels. They also extend their understanding of how language works, and learn to transfer this knowledge to different contexts. To achieve this, students develop an understanding of the requirements of different types of texts; they are introduced to increasingly sophisticated analyses of various kinds of literary, popular culture, and everyday texts, and they are given opportunities to engage with the technical aspects of texts.

#### Reading and Viewing

Reading and viewing involves understanding, interpreting, reflecting upon, and enjoying written and visual, print and non-print texts. Reading involves active engagement with texts and the development of knowledge about the relationship between them and the contexts in which they are created.

#### Writing

Writing refers to the active process of conceiving, planning, composing, editing and publishing fiction and non-fiction texts. Writing involves using appropriate language for particular purposes or occasions to represent and reflect on ideas, issues, arguments, events, experience, character, emotion and information.

#### Speaking and Listening

Speaking and listening refers to the various formal and informal ways oral language is used to convey and receive meaning. It involves the development and demonstration of knowledge about the appropriate oral language for particular audiences and occasions, including body language and voice.

### LITERATURE

---

#### Course Content

This is an advanced unit for English students which focuses on how authors create texts to express views and values. This unit uses a broad range of written, oral and visual material to explore Australian and international literature through the study of texts from different historical periods and cultural contexts. Novels, film, short stories, poetry and plays will be studied.

#### Topics:

- Individual and group oral activities with an emphasis on discussion and the expression of a point of view in response to texts studied.
- The reading and study of two specified Australian novels and selected short stories. All students will study the same two print texts.
- The study of film as literature.
- Writing with purpose and language exploration with an emphasis on the importance of planning, drafting, and editing.

## MATHEMATICS

### PREPARATORY MATHS METHODS 1

---

This is an advanced unit suited to students with **particularly strong ability and interest in mathematics**. The course will provide students with the opportunity to extend beyond the level six standards and so attain the highest grades possible in the Victorian Curriculum assessment scheme. This subject will prepare students well for the most demanding of Year 11 VCE Mathematics units available – Mathematical Methods Units 1 & 2 and Specialist Maths Units 1 & 2.

#### Topics

Real Number System; Algebra; Linear Equations; Simultaneous equations; Linear Graphs; Geometry;

### PREPARATORY MATHS METHODS 2

---

This is an advanced unit suited to students with **particularly strong ability and interest in mathematics**. The course will provide students with the opportunity to extend beyond the level six standards and so attain the highest grades possible in the Victorian Curriculum assessment scheme. This subject will prepare students well for the most demanding of the Year 11 VCE Mathematics units available – Mathematics Methods Units 1 & 2 and Specialist Maths Units 1 & 2.

#### Topics

Factorisation Techniques; Quadratic Equations and Functions; Circular functions; Indices and Logarithms; Trigonometry; Probability

### PREPARATORY GENERAL MATHEMATICS 1

---

Extension work will be provided for the more able students and, if this is completed, students may attain VELs level 6. It is expected that the majority of students studying this unit will progress to VCE General Maths in Year 11 and then Further Maths in Year 12.

#### Topics

Financial Maths; Measurement; Trigonometry; Financial Mathematics; Matrices

### PREPARATORY GENERAL MATHEMATICS 2

---

This unit follows Preparatory General Maths 1 and is the Mathematics unit appropriate for most students in Year 10. Extension work will be provided and students who complete it satisfactorily may attain VELs level 6. It is expected that the majority of students studying this unit will progress to VCE General Maths in Year 11 and then Further Maths in Year 12.

#### Topics

Probability; Algebra; Geometry, Linear relationships, Statistics and Networks

## THE ARTS

### VISUAL ART

---

#### Course Content

Students will be instructed in a range of art forms, aesthetics and design experiences with an increasing emphasis on the student's individual style and development. Students will further develop their knowledge and application of art elements, principles, concepts and artist's inspiration. Students will study a range of art styles and maintain a visual diary. Art is considered to be suitable preparation for VCE Studio Arts.

## DRAMA

---

### Course Content

This unit focuses on drama work with voice, face, movement, characterisation and improvisation. Extended skills such as juggling, puppetry and film making are available. There is an emphasis on a major ensemble performance. Commitment and teamwork are essential. The course varies from year to year dependent on the interests and choices of each group of students.

**Topics** – Accents; Performance analysis; Improvisation and advanced theatre sports; Expressive movement; Group devised performance/storythread/docudrama; Scriptwriting; Monologue (Including Shakespeare); Play construction; Self-evaluation; Facial expression; Film making; Juggling/puppetry.

## PHOTOGRAPHY

---

### Course Content

Students will further develop the skills required to work with digital photographic equipment. Students will learn to apply compositional techniques gaining an understanding of the history of photography and appreciation of photographic aesthetics. Students will develop photo manipulation techniques using Adobe Photoshop. This subject is considered a suitable pathway for VCE Studio Arts, Art and Media.

**Topics** - DSLR cameras, Automatic and manual settings, Adobe Photoshop, Electronic folios, Photographic styles.

## VISUAL COMMUNICATION DESIGN

---

### COURSE CONTENT

Students who select this subject should have an interest in design and the ability to create a range of possible solutions to design problems. A range of topics is covered from both aspects of this subject – creative (graphic design) and conventional (architectural and engineering). Computer, freehand and technical drawing techniques are developed.

**Topics** - Graphic design in advertising; Symbol design – corporate identity; Architectural planning; Lettering – construction and purpose

## VCE VET MUSIC (SA)

---

### Certificate III in Music Industry

**Music Performance Specialisation:** provides students with the opportunity to apply a broad range of knowledge and skills in varied work contexts in the music industry. Depending on the electives chosen, Units 1 and 2 include making a music demo, composing simple songs or musical pieces and preparing for performances. Units 3 and 4 offer scored assessment and include units such as developing improvisation skills, applying knowledge of genre to music making and performing music as part of a group or as a soloist.

## LANGUAGES

---

## VCE VET APPLIED LANGUAGES (INDONESIAN)

---

Certificate II in Applied Language: a nationally accredited curriculum that offers students the opportunity to develop basic oral and written communication in the language in a range of standard social and workplace situations.

### PHYSICAL EDUCATION – 1

---

#### Course Content

This class is designed to encourage students to develop their understanding of fitness components and investigate how they can improve particular fitness components. Students will engage in a variety of fitness testing and from this will develop training programs to improve their performance. Students will have practical experience by implementing their training programs and improving their fundamental motor skills and skill acquisition through major and minor games.

**Topics-** Enablers and barriers that impact physical activity levels, training programs, human anatomy, energy systems, role of technology in fitness analyses, modified games and a range of team and individual sports.

### VCE VET SPORT AND RECREATION

---

**Certificate III in Sport and Recreation:** provides students with the skills and knowledge to work in the Sport and Recreation industry. In Units 1 and 2, students can choose from a range of electives to create a program of their choice, including sport specific activities, conducting events, outdoor recreation or fitness programs. Units 3 and 4 offers scored assessment and includes core units such as conduct basic warm-up and cool-down programs, plan and conduct programs, risk assessment, and control and knowledge of coaching practices.

### VCE VET HEALTH SERVICES ASSISTANCE

---

**Certificate III in Health Services Assistance:** is offered over two years and provides students with the knowledge and skills to enhance their employment prospects in the Health industry. This is an entry level qualification which covers workers who provide support for the effective functioning of health services. The course includes an interactive simulated work environment, which allows students to assume numerous roles and tasks in the health services assistance field; focussing on current industry practice, regulations and policies that are implemented in the Health Service Industry. Learning areas: Australian health care system; Interpreting and applying medical terminology; Healthy body systems; Assisting with movement; Communicating with clients.

### PHYSICAL EDUCATION – RECREATIONAL SPORT

---

#### Course Content

This unit is designed to expose students to a variety of non-traditional team sports and recreational and outdoor pursuits in the local area. It is hoped that this participation will encourage students to pursue alternative approaches to health and physical fitness and develop lifelong participation in physical activity and a greater awareness, respect and knowledge for the environment.

**Topics-** Benefits of physical activity, measuring physical activity, recreational facilities in the local area, body systems, archery, golf, badminton, tennis, lawn bowls, bocce, croquet, yoga, clay target shooting, ten pin bowling, self-defence, safety, orienteering, bush craft and canoeing.

## SCIENCE

### AGRICULTURE

#### Course Content

This subject investigates various types of farming as a profitable business. Farming enterprises could include beef cattle, dairy, sheep, poultry or pigs. Students will attend at least one excursion where research will be carried out. Students will carry out practical exercises and theoretical exercises related to climate, soil and land management. Possible projects include, hatching chicks, observing calf births, speaking with farm managers and growing vegetables. The subject will also look at maintaining the environment for future generations.

**Topics** - Farming as a business, Ecology/Biodiversity, Sheep, Poultry, Weeds, Farming and the environment, Farm Machinery

### BIOLOGY

#### Course Content

This subject investigates microscopy, microbiology and genetics. Students will become familiar with the use of various types of microscopes and use their skills to investigate various areas of microbiology. They will study how micro-organisms can be both beneficial and harmful to humans. In genetics, the role of DNA and genes in cell division and inheritance will be studied. Students will undertake a detailed study in an area of Biotechnology such as genetic engineering and investigate the implications of modern scientific research.

**Topics** - Microscopy, Genetics, Microbiology

### CHEMISTRY

#### Course Content

Students examine the Periodic Table and atomic theory. They investigate and explain trends in the Periodic table and link electronic configuration of atoms to the types of bonding that occur. Students study the models for metallic, ionic and covalent bonding and relate this to physical properties of substances. Students become familiar with the use of chemical symbols, formulae and equations to describe observations and data collected during experiments. They also study reaction rates, types of reactions, with a focus on precipitation, acid-base and combustion reactions. Students also investigate Organic Chemistry.

**Topics** - Matter, Atomic Theory, the Periodic Table, Bonding, Chemical Reactions and Equations, Organic Chemistry

### PHYSICS

#### Course Content

This subject investigates the motion of objects, interaction of forces and exchange of energy. . Students will investigate kinematics and energy and apply their knowledge in the context of motion. Students will learn about nuclear reactions, radioactivity and applications to nuclear power generation. They will also study cosmology and investigate galaxies, stars. The Big Bang Theory and the solar system.

**Topics** - Motion, Nuclear Physics, Astronomy

### PSYCHOLOGY

#### Course Content

Students explore the relationship between mind and behaviour. The key areas covered in this unit are Forensic Psychology, Educational and Developmental Psychology, Mental disorders and illnesses as well as Research methods used in Psychology. Students will also see how Psychological theories can apply to everyday situations and have further understanding of human behaviour.

**Topics** - Psychology as a Science, Psychology as a profession, Research methods in psychology

## HUMANITIES

### CIVICS AND CITIZENSHIP - THE LAW AND YOU

#### Course Content

In this unit, students explore the different types of law, identifying the difference between criminal and civil law. They learn about Australia's system of government and examine the process of a Federal election. Students study the Australian court system at depth, covering aspects such as the hierarchy and appealed decisions. They identify how laws can be changed and how they as individuals can influence these changes. Students also explore the powers of the police force.

**Topics** - Australia's System of Government, Political Parties, Parliament Made Law, Criminal and Civil Law, The Court Hierarchy, The Role of the Police

### ECONOMICS - BUSINESS AND ENTERPRISE

#### Course Content

This unit will explore the contribution of Australian entrepreneurs to the Economy. Students will study what is involved in managing a business, focussing on ownership structures, marketing and financial management. They will analyse the Australian economy, exploring concepts such as the market mechanism, economic issues and the role of government. The Global Economy will also be explored through the study of International trade, foreign exchange and globalisation.

**Topics** - Enterprise, Innovation and Entrepreneurship; Managing a business; The Australian Economy; The Global Marketplace.

### GEOGRAPHY - SUSTAINABILITY

#### Course Content

This unit examines Environmental Management, focussing on global warming, coastal regions and global wellbeing. Students use geographical thinking, skills and technological tools to examine some environmental challenges that will affect their future lives, and to find out how geography contributes to the understanding and management of these challenges. Students will study the nature of wellbeing around the world and how it can be measured.

**Topics** - Environmental Change and Management, Global wellbeing

### HISTORY – A CHANGING AUSTRALIA

#### Course Content

This unit introduces students to Australia during the inter-war period, exploring the Roaring Twenties and the Great Depression. Students complete a depth study of WWII, looking at significant events of the war in Europe and in the Pacific. The Cold War period is studied, exploring aspects such as the conflict in Vietnam. Students will also develop their knowledge of the fight for civil rights, both in the US and for Indigenous Australians.

**Topics** - 'The Inter-war period; WW2; The Cold War; Rights and Freedoms.

## DESIGN CREATIVITY & TECHNOLOGY UNITS

### VCE VET BUILDING & CONSTRUCTION

**Certificate II in Building and Construction (Bricklaying, Carpentry, Painting and Decorating, Wall and Ceiling Lining, Wall and Floor Tiling, Solid Plastering and Stonemasonry) Pre-apprenticeship:** state accredited curriculum which provides students with the knowledge and skills to enhance their employment prospects in the building and construction industry. The program offers full completion of the pre-apprenticeship and includes units such as safe handling and use of plant and power tools, quality principles for the construction industry, calculations and workplace documents and plans. Stream-specific units focus on providing foundation skills necessary for the chosen sectors in industry areas: carpentry, bricklaying, painting and decorating, wall and ceiling lining, wall and floor tiling, solid plastering and stonemasonry.

## **WOOD, DESIGN & PRODUCTION**

### **Course Content**

In this unit, students focus on the development of a wood based production piece using the Design Process in consultation with a client. The maintenance and safe operation of tools and equipment will be an important element of the unit.

**Topics** - Design planning; The development of design prototyping; Drawing and developing procedural plans; Safe use and understanding of tools and equipment; Material costing and purchase requirements

## **VCE VET AUTOMOTIVE**

---

**VIC Certificate II in Automotive Studies (pre-vocational):** a state accredited curriculum which offers students the opportunity to develop their skills and knowledge across a range of automotive sectors including automotive mechanical and electrical, vehicle body panel beating, spray painting, trimming and making; and vehicle engine reconditioning.

## **METALS FABRICATION**

---

### **Course Content**

This unit examines the uses of selected materials; the processes, tools, equipment and machines related to the materials; and the criteria used for the selection of a material. Students are required to: undertake production tasks that develop knowledge of materials, skills in the use of tools, machines and equipment associated with the material, and skills in a range of construction and production techniques; plan and conduct workshop material testing procedures, establish safe working practices, develop and apply skills of observation, evaluate results and make recommendations about material selection; broaden their knowledge of issues arising from materials and technology.

**Topics** - Learn and adhere to correct workshop safety practices. Make a teacher negotiated project incorporating basic skills and processes. Complete theory and calculation exercises as well as an investigation project. Cut materials using hand processes and then form them into appropriate shapes. Select appropriate welding processes for particular applications. Complete practical welding skills

## **VCE VET HOSPITALITY- KITCHEN OPERATIONS**

---

**Certificate II in Kitchen Operations:** prepares students with a limited range of food preparation and cookery skills to prepare food and menu items. Includes units such as; preparing appetisers and salads, preparing stocks, soups and sauces, preparing vegetable, fruit and farinaceous dishes, preparing poultry dishes.

## **CREATIVE COOKING**

---

### **Course Content**

Students design and create healthy food solutions in that can be used in the home. They follow the Design Technologies curriculum interwoven with Health & PE Curriculum, covering healthy eating and nutrition. Students are given the opportunity to create 'designed solutions' in different contexts, including food specialisations and food production. Sustainability issues are discussed throughout. Assessments include; CATs relating to three main topics taking about six weeks each. These are: Nuts about nutrition, Healthy takeaway meals and Techno food.

## **VCE VET Certificate II in Information, Digital Media and Technology**

---

The VCE VET Information, Digital Media and Technology program provides students with the opportunity to acquire and develop the skills, knowledge and confidence to work in the areas of information technology in a range of industry areas. Organisational and specialist activity skills in addition to some leadership skills will be developed through the units of competency undertaken in Units 1 to 4 of the selected program.

## VCE UNITS 1-4 COURSE DESCRIPTIONS

### ACCOUNTING 1 – ESTABLISHING AND OPERATING A SERVICE BUSINESS

**Unit Statement** - This unit focuses on the establishment of a small business and the accounting and financial management of the business. Students are introduced to the processes of gathering and recording financial data and the reporting and analysing of accounting information by internal and external users. The cash basis of recording and reporting is used throughout this unit. Using single entry recording of financial data and analysis of accounting information, students examine the role of accounting in the decision-making process for a sole proprietor of a service business.

**Content** - Going into business; Recording financial data and reporting accounting information

**Outcomes** - Describe the resources required, and explain and discuss the knowledge and skills necessary, to set up a small business. Identify and record, the financial data, and report and explain accounting information, for a sole proprietor of a service business.

### ACCOUNTING 2 – ACCOUNTING FOR A TRADING BUSINESS

**Unit Statement** - This unit extends the accounting process from a service business and focuses on accounting for a sole proprietor of a single activity trading business. Students use a single entry recording system for cash and credit transactions and the accrual method for determining profit. They analyse and evaluate the performance of the business using financial and non-financial information. Using these evaluations, students suggest strategies to the owner on how to improve the performance of the business.

**Content** - Recording financial data and reporting accounting information ; ICT in accounting; Evaluation of business performance

**Outcomes** - Record and report financial data and information for a sole trader. Record financial data and report accounting information for a single activity sole trader using a commercial accounting software package, and discuss the use of ICT in the accounting process. Select and use financial and non-financial information to evaluate the performance of a business and discuss strategies that may improve business performance.

### ACCOUNTING 3 – RECORDING AND REPORTING FOR A TRADING BUSINESS

**Unit Statement** - **A background in Unit 2 Accounting is recommended.** This unit focuses on financial accounting for a single activity trading business as operated by a sole trader and emphasises the role of accounting as an information system. Students use the double entry system of recording financial data and prepare reports using the accrual basis of accounting. The perpetual method of stock recording with the First In, First Out (FIFO) method is also used.

**Content Outline** - Recording of financial data; Balance day adjustments and reporting and interpreting accounting information

**Outcomes** - Record financial data for a single activity sole trader using a double entry system, and discuss the function of various aspects of this accounting system. Record balance day adjustments and prepare and interpret accounting reports.

### ACCOUNTING 4 - CONTROL AND ANALYSIS OF BUSINESS PERFORMANCE

**Unit Statement** - This unit provides an extension of the recording and reporting processes from Unit 3 and the use of financial and non-financial information in assisting management in the decision-making process. The unit is based on the double entry accounting system and the accrual method of reporting for a single activity trading business using the perpetual inventory recording system. Students investigate the role and importance of budgeting for the business and undertake the practical completion of budgets for cash, profit and financial position. Students interpret accounting information from accounting reports and graphical representations, and analyse the results to suggest strategies to the owner on how to improve the performance of the business.

**Content Outline** - Extension of recording and reporting; financial planning and decision-making

**Outcomes** - Record and report financial data using double entry accounting and report accounting information using an accrual-based system for a single activity sole trader, and discuss the function of various aspects of this accounting system. Prepare budgets and variance reports, evaluate the performance of a business using financial and non-financial information and discuss strategies to improve the profitability and liquidity of the business.

## AGRICULTURE & HORTICULTURAL STUDIES 1

---

**Unit Statement** - In unit 1 students study local agricultural and horticultural operations and the factors that influence these operations, including historical, environmental, social and economic factors. Students apply their knowledge and skills in researching the feasibility and establishment of a small agricultural and/or horticultural business project.

**Content Outline** - Influences on Australian agricultural and horticultural systems; Agricultural and horticultural systems.

**Outcomes** - Describe a range of biological, physical and human resources and their influence on horticultural systems in the local area and explain the importance of the application of scientific principles in production. Plan, implement and evaluate management and production activities to operate a small agricultural and/or a horticultural business project including the care of living things.

## AGRICULTURE & HORTICULTURAL STUDIES 2

---

**Unit Statement** - This unit focuses on plant and animal nutrition, growth and reproduction and their relationships with agribusiness systems.

**Content Outline** - Students use a small business project to explore the role of agribusiness; Production systems and processes

**Outcomes** - Explain the nutritive and reproductive processes of plants and animals, their application to agricultural and horticultural production systems, and specific biological factors that influence production systems. Review and report on the production processes and marketing of a small agricultural and/or horticultural business project, demonstrating how the business adds value to the product and manages the risk.

## AGRICULTURE & HORTICULTURAL STUDIES 3

---

**Unit Statement** - This unit focuses on a range of technology that is currently used by commercial agricultural and/or horticultural businesses, and reviews the areas where change and innovation are occurring. The likely impact of new and emerging developments in technology on the business will be reviewed and analysed.

**Content Outline** - Current technology; New and emerging technology; Business design

**Outcomes** - Analyse and evaluate a range of technologies commonly used in agricultural and/or horticultural businesses explain the reasons for the selection and application of technology for a specific business. Describe and analyse a range of new or emerging technologies and evaluate the likely impact of a selected innovation on the sustainability of a specific agriculture/horticulture business. Design and implement and report on progress of a small commercial agricultural or horticultural business project that involves the management and care of living plants or animals.

## AGRICULTURE & HORTICULTURAL STUDIES 4

---

**Unit Statement** - This unit focuses on the management of agricultural and/or horticultural systems within the context of economic, social and environmental sustainability. It takes a holistic ecological approach to issues associated with land, plant and animal management. Students are expected to apply the principles and concepts of such an approach across a range of agricultural and/or horticultural situations.

**Content Outline** - Business plan implementation and evaluation; Sustainability in agriculture and/or horticulture; Resource management & maintenance

**Outcomes** - Monitor the continued operation of the small business project commenced in Unit 3 Outcome 3, and evaluate and report on its operation and outcomes in relation to the business plan. Evaluate sustainable resource management practices within agriculture and/or horticulture. Apply and analyse management techniques that promote economic, social and environmental sustainability of agriculture/horticulture business.

## BIOLOGY 1 - HOW DO LIVING THINGS STAY ALIVE?

---

**Unit Statement** - In this unit students are introduced to some of the challenges to an organism in sustaining life. Students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, and the requirements for sustaining cellular processes in terms of inputs and outputs. They analyse types of adaptations that enhance the organism's survival in a particular environment and consider the role homeostatic mechanisms play in maintaining the internal environment. Students investigate how a diverse group of organisms form a living interconnected community that is adapted to, and utilises, the abiotic resources of its habitat. The role of a keystone species in maintaining the structure of an ecosystem is explored. Students consider how the planet's biodiversity is classified and the factors that affect the growth of a population.

**Outcomes** - On completion of this unit the student should be able to investigate and explain how cellular structures and systems function to sustain life, be able to explain how various adaptations enhance the survival of an individual organism, investigate the relationships between organisms that form a living community and their habitat, and analyse the impacts of factors that affect population growth. A student practical investigation related to the survival of an organism or species is also undertaken.

## BIOLOGY 2 - HOW IS CONTINUITY OF LIFE MAINTAINED?

---

**Unit Statement** - In this unit students focus on cell reproduction and the transmission of biological information from generation to generation. Students learn that all cells are derived from pre-existing cells through the cell cycle. They examine the process of DNA replication and compare cell division in both prokaryotic and eukaryotic organisms. Students explore the mechanisms of asexual and sexual reproductive strategies and consider the advantages and disadvantages of these two types of reproduction. The role of stem cells in the differentiation, growth, repair and replacement of cells in humans is examined, and their potential use in medical therapies is considered. Students use chromosome theory and terminology from classical genetics to explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses. They explore the relationship between genes, the environment and the regulation of genes in giving rise to phenotypes. They consider the role of genetic knowledge in decision making about the inheritance of autosomal dominant, autosomal recessive and sex-linked genetic conditions. In this context the uses of genetic screening and its social and ethical issues are examined.

**Outcomes** - On completion of this unit the student should be able to compare the advantages and disadvantages of asexual and sexual reproduction, explain how changes within the cell cycle may have an impact on cellular or tissue system function and identify the role of stem cells in cell growth and cell differentiation and in medical therapies. The student should be able to apply an understanding of genetics to describe patterns of inheritance, analyse pedigree charts, predict outcomes of genetic crosses and identify the implications of the uses of genetic screening and decision making related to inheritance. Students should also be able to investigate and communicate a substantiated response to a question related to an issue in genetics and/or reproductive science.

## BIOLOGY 3 – HOW DO CELLS MAINTAIN LIFE?

---

**Unit Statement** - In this unit students investigate the workings of the cell. They explore the importance of the insolubility of the plasma membrane in water and its differential permeability to specific solutes in defining the cell, its internal spaces and the control of the movement of molecules and ions in and out of such spaces. Students consider base pairing specificity, the binding of enzymes and substrates, the response of receptors to signalling molecules and reactions between antigens and antibodies to highlight the importance of molecular interactions based on the complementary nature of specific molecules.

Students study the synthesis, structure and function of nucleic acids and proteins as key molecules in cellular processes. They explore the chemistry of cells by examining the nature of biochemical pathways, their components and energy transformations. Cells communicate with each other using a variety of signalling molecules. Students consider the types of signals, the transduction of information within the cell and cellular responses. At this molecular level students study the human immune system and the interactions between its components to provide immunity to a specific antigen.

**Outcomes** - On completion of this students should be able to explain the dynamic nature of the cell in terms of key cellular processes including regulation, photosynthesis and cellular respiration, and analyse factors that affect the rate of biochemical reactions. Students should be able to apply a stimulus-response model to explain how cells communicate with each other, outline human responses to invading pathogens, distinguish between the different ways that immunity may be acquired, and explain how malfunctions of the immune system cause disease.

## BIOLOGY 4 - HOW DOES LIFE CHANGE AND RESPOND TO CHALLENGES OVER TIME?

---

**Unit Statement** - In this unit students consider the continual change and challenges to which life on Earth has been subjected. They investigate the relatedness between species and the impact of various change events on a population's gene pool.

The accumulation of changes over time is considered as a mechanism for biological evolution by natural selection that leads to the rise of new species. Students examine change in life forms using evidence from palaeontology, biogeography, developmental biology and structural morphology. They explore how technological developments in the fields of comparative genomics, molecular homology and bioinformatics have resulted in evidence of change through measurements of relatedness between species.

Students examine the structural and cognitive trends in the human fossil record and the interrelationships between human biological and cultural evolution. The biological consequences, and social and ethical implications, of manipulating the DNA molecule and applying biotechnologies is explored for both the individual and the species.

**Outcomes** - On completion of this unit students should be able to analyse evidence for evolutionary change, explain how relatedness between species is determined, and elaborate on the consequences of biological change in human evolution. Students should be able to describe how tools and techniques can be used to manipulate DNA, explain how biological knowledge is applied to biotechnical applications, and analyse the interrelationship between scientific knowledge and its applications in society. A student-designed or adapted investigation related to cellular processes and/or biological change and continuity over time is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4. The investigation is to relate to knowledge and skills developed across Units 3 and 4 and may be undertaken by the student through laboratory work and/or fieldwork.

## **BUSINESS MANAGEMENT 1- PLANNING A BUSINESS**

---

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

**Outcomes** - On completion of this unit students should be able to describe how and why business ideas are created and developed, and explain the methods by which a culture of business innovation and entrepreneurship may be fostered in a nation. Students should be able to describe the external environment of a business and explain how the macro and operating factors within it may affect business planning. Students should also be able to describe the internal business environment and analyse how factors from within it may affect business planning.

## **BUSINESS MANAGEMENT 2- ESTABLISHING A BUSINESS**

---

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

**Outcomes** - On completion of this unit students should be able to explain the importance when establishing a business of complying with legal requirements and financial record keeping, and establishing effective policies and procedures. Students should be able to explain the importance of establishing a customer base and a marketing presence to achieve the objectives of the business, analyse effective marketing and public relations strategies and apply these strategies to business-related case studies. Students should also be able to discuss the staffing needs for a business and evaluate the benefits and limitations of management strategies in this area from both an employer and an employee perspective.

## **BUSINESS MANAGEMENT 3 – MANAGING A BUSINESS**

---

**Unit Statement** - In this unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relationship between each of these. Students investigate strategies to manage both staff and business operations to meet objectives. Students develop an understanding of the complexity and challenge of managing businesses and through the use of contemporary business case studies from the past four years have the opportunity to compare theoretical perspectives with current practice.

**Outcomes** - On completion of this unit students should be able to discuss the key characteristics of businesses and stakeholders, and analyse the relationship between corporate culture, management styles and management skills. Students should be able to explain theories of motivation and apply them to a range of contexts, and analyse and evaluate strategies related to the management of employees. Students should also be able to analyse the relationship between business objectives and operations management, and propose and evaluate strategies to improve the efficiency and effectiveness of business operations.

## **BUSINESS MANAGEMENT 4 – TRANSFORMING A BUSINESS**

---

**Unit Statement** - Businesses are under constant pressure to adapt and change to meet their objectives. In this unit students consider the importance of reviewing key performance indicators to determine current performance and the strategic management necessary to position a business for the future. Students study a theoretical model to undertake change, and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance. They investigate the importance of leadership in change management. Using a contemporary business case study from the past four years, students evaluate business practice against theory.

**Outcomes** - On completion of this unit students should be able to 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. Students should be able to 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.

## VCE VET Certificate II in Information, Digital Media and Technology

---

The VCE VET Information, Digital Media and Technology program provides students with the opportunity to acquire and develop the skills, knowledge and confidence to work in the areas of information technology in a range of industry areas. Organisational and specialist activity skills in addition to some leadership skills will be developed through the units of competency undertaken in Units 1 to 4 of the selected program.

### CHEMISTRY 1 HOW CAN THE DIVERSITY OF MATERIALS BE EXPLAINED?

---

**Unit Statement** - The development and use of materials for specific purposes is an important human endeavour. In this unit students investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials. Using their knowledge of elements and atomic structure students explore and explain the relationships between properties, structure and bonding forces within and between particles that vary in size from the visible, through nanoparticles, to molecules and atoms. Students examine the modification of metals, assess the factors that affect the formation of ionic crystals and investigate a range of non-metallic substances from molecules to polymers and giant lattices and relate their structures to specific applications. Students are introduced to quantitative concepts in chemistry including the mole concept. They apply their knowledge to determine the relative masses of elements and the composition of substances. Throughout the unit students use chemistry terminology including symbols, formulas, chemical nomenclature and equations to represent and explain observations and data from experiments, and to discuss chemical phenomena.

**Outcomes** - On completion of this unit the student should be able to relate the position of elements in the periodic table to their properties, investigate the structures and properties of metals and ionic compounds, and calculate mole quantities. The student should be able to investigate and explain the properties of carbon lattices and molecular substances with reference to their structures and bonding, use systematic nomenclature to name organic compounds, and explain how polymers can be designed for a purpose. Students should also be able to investigate a question related to the development, use and/or modification of a selected material or chemical and communicate a substantiated response to the question.

### CHEMISTRY 2 WHAT MAKES WATER SUCH A UNIQUE CHEMICAL?

---

**Unit Statement** - Water is the most widely used solvent on Earth. In this unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis. Students examine the polar nature of a water molecule and the intermolecular forces between water molecules. They explore the relationship between these bonding forces and the physical and chemical properties of water. In this context students investigate solubility, concentration, pH and reactions in water including precipitation, acid-base and redox. Students are introduced to stoichiometry and to analytical techniques and instrumental procedures and apply these to determine concentrations of different species in water samples, including chemical contaminants. They use chemistry terminology including symbols, units, formulas and equations to represent and explain observations and data from experiments, and to discuss chemical phenomena. Students explore the solvent properties of water in a variety of contexts and analyse selected issues associated with substances dissolved in water.

**Outcomes** - On completion of this unit the student should be able to relate the properties of water to its structure and bonding and explain the importance of the properties and reactions of water in selected contexts. The student should be able to measure amounts of dissolved substances in water and analyse water samples for salts, organic compounds and acids and bases. Students should also be able to design and undertake a quantitative laboratory investigation related to water quality, and draw conclusions based on evidence from collected data.

## CHEMISTRY 3- HOW CAN CHEMICAL PROCESSES BE DESIGNED TO OPTIMISE EFFICIENCY?

**Unit Statement** - The global demand for energy and materials is increasing with world population growth. In this unit students explore energy options and the chemical production of materials with reference to efficiencies, renewability and the minimisation of their impact on the environment.

Students compare and evaluate different chemical energy resources, including fossil fuels, biofuels, galvanic cells and fuel cells. They investigate the combustion of fuels, including the energy transformations involved, the use of stoichiometry to calculate the amounts of reactants and products involved in the reactions, and calculations of the amounts of energy released and their representations. Students consider the purpose, design and operating principles of galvanic cells, fuel cells and electrolytic cells. In this context they use the electrochemical series to predict and write half and overall redox equations and apply Faraday's laws to calculate quantities in electrolytic reactions.

Students analyse manufacturing processes with reference to factors that influence their reaction rates and extent. They investigate and apply the equilibrium law and Le Chatelier's principle to different reaction systems, including to predict and explain the conditions that will improve the efficiency and percentage yield of chemical processes.

They use the language and conventions of chemistry including symbols, units, chemical formulas and equations to represent and explain observations and data collected from experiments, and to discuss chemical phenomena.

### Outcomes

On completion of this unit students should be able to compare fuels quantitatively with reference to combustion products and energy outputs, apply knowledge of the electrochemical series to design, construct and test galvanic cells, and evaluate energy resources based on energy efficiency, renewability and environmental impact. Students should be able to apply rate and equilibrium principles to predict how the rate and extent of reactions can be optimised and explain how electrolysis is involved in the production of chemicals and in the recharging of batteries.

## CHEMISTRY 4- HOW ARE ORGANIC COMPOUNDS CATEGORISED, ANALYSED AND USED?

**Unit Statement** - The carbon atom has unique characteristics that explain the diversity and number of organic compounds that not only constitute living tissues but are also found in the fuels, foods, medicines and many of the materials we use in everyday life. In this unit students investigate the structural features, bonding, typical reactions and uses of the major families of organic compounds including those found in food.

Students study the ways in which organic structures are represented and named. They process data from instrumental analyses of organic compounds to confirm or deduce organic structures and perform volumetric analyses to determine the concentrations of organic chemicals in mixtures. Students consider the nature of the reactions involved to predict the products of reaction pathways and to design pathways to produce particular compounds from given starting materials. Students investigate key food molecules through an exploration of their chemical structures, the hydrolytic reactions in which they are broken down and the condensation reactions in which they are rebuilt to form new molecules. In this context the role of enzymes and coenzymes in facilitating chemical reactions is explored. Students use calorimetry as an investigative tool to determine the energy released in the combustion of foods.

**Outcomes** - On completion of this unit students should be able to compare the general structures and reactions of the major organic families of compounds, deduce structures of organic compounds using instrumental analysis data, and design reaction pathways for the synthesis of organic molecules. Students should be able to distinguish between the chemical structures of key food molecules, analyse the chemical reactions involved in the metabolism of the major components of food including the role of enzymes, and calculate the energy content of food using calorimetry. Students should also be able to design and undertake a practical investigation related to energy and/or food, and present methodologies, findings and conclusions in a scientific poster.

## VET INFORMATION AND COMMUNICATIONS TECHNOLOGY

**Unit Statement** – the VCE VET Information and Technology program aims to provide participants with the knowledge and skills to achieve competencies that will enhance their employment prospects in the information and communications technology or related industries and enable participants to gain a recognised credential and to make an informed choice of vocation or career path.

## **DRAMA 1 - Introducing performance styles**

---

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

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

**Outcomes** - Devise and document solo and/or ensemble drama works based on experiences and/or stories. Perform devised drama works to an audience. Analyse the development, and the performance to an audience, of their devised work. Analyse the presentation of ideas, stories and characters in a drama performance by professional or other drama practitioners.

## **DRAMA 2 – AUSTRALIAN IDENTITY**

---

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

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

**Outcomes** - Devise and document the processes used to create a solo or ensemble performance that reflects an aspect or aspects of Australian identity and contemporary drama practice. Present a devised performance that reflects aspects of Australian identity and contemporary drama practice. Analyse the development, and performance to an audience, of their devised work. Analyse and evaluate a performance of a drama work by Australian practitioners.

## **DRAMA 3 – DEvised ENSEMBLE PERFORMANCE**

---

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

**Content Outline** - Devising and presenting ensemble performance, Analysing a devised ensemble performance, Analysing and evaluating a professional drama performance.

**Outcomes** - Develop and present characters within a devised ensemble performance that goes beyond a representation of real life as it is lived. Analyse the use of processes, techniques and skills to create and present a devised ensemble performance. Analyse and evaluate a professional drama performance.

## DRAMA 4 – DEVISED SOLO PERFORMANCE

---

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

**Content Outline** - Demonstrating techniques of solo performance, Devising a solo performance, Analysing and evaluating a devised solo performance.

**Outcomes** - Demonstrate, in response to given stimulus material, application of symbol and transformation of character, time and place, and describe the techniques used. Create, develop and perform a solo performance in response to a prescribed structure. Analyse and evaluate the creation, development and presentation of a solo performance devised in response to a prescribed structure.

## ENGLISH 1

---

**Unit Statement** - In this unit, students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts and create their own texts intended to position audiences. Students develop their skills in creating written, spoken and multimodal texts.

**Outcome 1** - On completion of this unit the student should be able to produce analytical and creative responses to texts.

**Outcome 2** - *On completion of this unit the student should be able to analyse how argument and persuasive language can be used to position audiences, and create their own texts intended to position audiences.*

## ENGLISH 2

---

**Unit Statement** - In this unit students compare the presentation of ideas, issues and themes in texts. They analyse arguments presented and the use of persuasive language in texts and create their own texts intended to position audiences. Students develop their skills in creating written, spoken and multimodal texts.

**Outcome 1** - On completion of this unit the student should be able to compare the presentation of ideas, issues and themes in two texts.

**Outcome 2** - *On completion of this unit the student should be able to identify and analyse how argument and persuasive language are used in text/s that attempt to influence an audience, and create a text which presents a point of view.*

## ENGLISH 3

---

**Unit Statement** - In this unit students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts.

**Outcome 1** - On completion of this unit the student should be able to produce an analytical interpretation of a selected text, and a creative response to a different selected text.

**Outcome 2** - On completion of this unit the student should be able to analyse and compare the use of argument and persuasive language in texts that present a point of view on an issue currently debated in the media.

## ENGLISH 4

---

**Unit Statement** - In this unit students compare the presentation of ideas, issues and themes in texts.

They create an oral presentation intended to position audiences about an issue currently debated in the media.

**Outcome 1** - On completion of this unit the student should be able to produce a detailed comparison which analyses how two selected texts present ideas, issues and themes.

**Outcome 2** - On completion of this unit the student should be able to construct a sustained and reasoned point of view on an issue currently debated in the media.

## ENGLISH LANGUAGE 1

**Unit Statement** - In this unit, students consider the way language is organised so that its users have the means to make sense of their experiences and to interact with others. Students explore the various functions of language and the nature of language as an elaborate system of signs. The relationship between speech and writing as the dominant modes of language and the impact of situational and cultural contexts on language choices are also considered. Students investigate children's ability to acquire language and the stages of language acquisition across a range of subsystems.

Meaning can be conveyed through a range of modes: speech, writing and sign. Languages allow for communication through actions, whether it be producing speech sounds and graphic symbols such as letters, or giving non-verbal signals through systems such as sign language. Each mode can combine with other modes for the purposes of communication. Students also consider the role of paralinguistic features in conveying meaning.

Students learn that language choices are always influenced by the situational and cultural contexts in which they occur and are based on the conventional understandings and traditions that shape and reflect our view of the world. They come to understand that language is never a neutral and transparent means of representing reality, and that it can encode social and cultural understandings.

Students learn that the situational elements of a language exchange, such as the function, field, mode, setting and relationships between participants, influence language choice. Cultural factors, such as the values, attitudes and beliefs held by participants and the wider community, also affect people's linguistic choices.

**Outcomes** - On completion of this unit the student should be able to identify and describe primary aspects of the nature and functions of human language. The student should be able to describe what children learn when they acquire language and discuss a range of perspectives on how language is acquired.

## ENGLISH LANGUAGE 2

**Unit Statement** - In this unit, students focus on language change. Languages are dynamic and language change is an inevitable and a continuous process. Students consider factors contributing to change over time in the English language and factors contributing to the spread of English. They explore texts from the past and from the present, considering how all subsystems of the language system are affected – phonetics and phonology, morphology and lexicology, syntax, discourse and semantics. Attitudes to language change vary considerably and these are also considered.

In addition to developing an understanding of how English has been transformed over the centuries, students explore the various possibilities for the future of English. They consider how the global spread of English has led to a diversification of the language and to English now being used by more people as an additional or a foreign language than as a first language. Contact between English and other languages has led to the development of geographical and ethnic varieties, but has also hastened the decline of indigenous languages. Students consider the cultural repercussions of the spread of English.

**Outcomes** - On completion of this unit the student should be able to describe language change as represented in a range of texts and analyse a range of attitudes to language change. The student should be able to describe and explain the effects of the global spread of English in terms of both conformity and diversity, through a range of spoken and written texts.

## ENGLISH FOUNDATION 1

**Unit Statement** - The study of English encourages the development of literate individuals. The Foundation English course is designed for students who may require a more vocationally orientated approach to English or may be aiming to enter the work-force upon completing their post-compulsory studies. It is suited to students who need additional time and assistance to strengthen and refine their literary skills to support VCE or VCAL studies. Foundation English draws on and strengthens skills gained and the knowledge students have acquired about texts and language in the English domain. It integrates speaking, listening, reading, viewing and writing.

**Content Outline** Essentials of English: Reading and Writing

**Outcomes** - Write summaries of short texts; Write for a specific purpose for a workplace, personal or community audience.

## ENGLISH FOUNDATION 2

---

**Unit Statement** - The study of English encourages the development of literate individuals. The Foundation English course is designed for students who may require a more vocationally orientated approach to English or may be aiming to enter the work-force upon completing their post-compulsory studies. It is suited to students who need additional time and assistance to strengthen and refine their literary skills to support VCE or VCAL studies. Foundation English draws on and strengthens skills gained and the knowledge students have acquired about texts and language in the English domain in VELs. It integrates speaking, listening, reading, viewing and writing.

**Content Outline** - Essentials of English: Reading and Writing

**Outcomes** - Discuss key aspects of a short literary, everyday or media text, in a written response. Write for a range of purposes for workplace, personal or community audiences.

## FOOD STUDIES 1 - FOOD ORIGINS

---

This unit focuses on food from historical and cultural perspectives.

- Students learn the origins and roles of food through time and across the world.
- Australian indigenous food prior to European settlement
- Food patterns have changed since over time
- Investigate cuisines that are part of Australia's culinary identity
- Influence of technology and globalisation on food patterns.

This subject is theory based with a practical component. Practical activities may include; sensory and dietary analysis, design briefs, product analysis and comparison e.g. taste testing, media analysis, demonstrations, cooking and scientific experiments.

## FOOD STUDIES 2 – FOOD MAKERS

---

This unit focuses investigating food systems in contemporary Australia.

- Commercial food production industries,
- Food production in small-scale domestic settings.
- Significance of food industries to the Australian economy
- Provide safe, high-quality food that meets the needs of consumers.

This subject is theory based with a practical component. Practical activities may include; sensory and dietary analysis, design briefs, product analysis and comparison e.g. taste testing, media analysis, demonstrations, cooking and scientific experiments.

## FOOD STUDIES 3 – FOOD IN DAILY LIFE

---

In this unit, students:

- Explore the science of food
- Our physical need for it and how it nourishes and sometimes harms our bodies
- Appreciating food and the microbiology of digestion.
- The functional properties of food and the changes that occur during food preparation and cooking.
- The scientific rationale behind the Australian Dietary Guidelines and the Australian Guide to Healthy Eating
- Influences on food choice: how communities, families and individuals change their eating patterns over time
- Food values and behaviours developed within social environments
- The role of food in shaping and expressing identity and connectedness
- Behavioural principles that assist in the establishment of lifelong, healthy dietary patterns.

This subject is theory based with a practical component. Practical activities may include; sensory and dietary analysis, design briefs, product analysis and comparison e.g. taste testing, media analysis, demonstrations, cooking and scientific experiments.

## FOOD STUDIES 4 – FOOD ISSUES, CHALLENGES AND FUTURES

---

In this unit, students:

- Focus on issues about the environment, ethics, farming practices, the development and application of technologies
- Challenges of food security, food safety, food wastage, and the use and management of water and land.
- A selected food related topic is researched focusing on one of the following areas; environmental, ethical or social equity
- Using food information to empower consumers to make informed food choices and recognising the increasing misinformation available to consumers
- Navigation of contemporary food fads, trends and diets.
- Practise and improve food selection skills by interpreting food labels and analysing the marketing terms used on food packaging.

This subject is theory based with a practical component. Practical activities may include; sensory and dietary analysis, design briefs, product analysis and comparison e.g. taste testing, media analysis, demonstrations, cooking and scientific experiments.

## VCE VET HOSPITALITY

---

**Certificate II in Kitchen Operations:** prepares students with a limited range of food preparation and cookery skills to prepare food and menu items. Includes units such as; preparing appetisers and salads, preparing stocks, soups and sauces, preparing vegetable, fruit and farinaceous dishes, preparing poultry dishes.

## GEOGRAPHY 1 – HAZARDS AND DISASTERS

---

**Unit Statement** - In this unit students undertake an overview of hazards before investigating two contrasting types of hazards and the responses to them by people.

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

**Outcomes** – The student should be able to analyse, describe and explain the nature of hazards and impacts of hazard events at a range of scales. They should also be able to analyse and explain the nature, purpose and effectiveness of a range of responses to selected hazards and disasters.

## GEOGRAPHY 2 – TOURISM

---

**Unit Statement** - In this unit students investigate the characteristics of tourism, with particular emphasis on where it has developed, its various forms, how it has changed and continues to change and its impacts on people, places and environments. They select contrasting examples of tourism from within Australia and elsewhere in the world to support their investigations. The study of tourism at local, regional and global scales emphasises the interconnection within and between places. For example, the interconnections of climate, landforms and culture help determine the characteristics of a place that can prove attractive to tourists. There is an interconnection between places tourists originate from and their destinations through the development of communication and transport infrastructure, employment, together with cultural preservation and acculturation. The growth of tourism at all scales requires careful management to ensure environmentally sustainable and economically viable tourism. Students undertake fieldwork in this unit and report on fieldwork using the structure provided

**Outcomes** – The student should be able to analyse, describe and explain the nature of tourism at a range of scales. They should also be able to analyse and explain the impacts of tourism on people, places and environments and evaluate the effectiveness of strategies for managing tourism.

## **GEOGRAPHY 3 – CHANGING THE LAND**

**Unit Statement** - This unit focuses on two investigations of geographical change: change to land cover and change to land use. Land cover includes biomes such as forest, grassland, tundra and wetlands, as well as land covered by ice and water. Land cover is the natural state of the biophysical environment developed over time as a result of the interconnection between climate, soils, landforms and flora and fauna and, increasingly, interconnections with human activity. Natural land cover has been altered by many processes such as geomorphological events, plant succession and climate change. People have modified land cover to produce a range of land uses to satisfy needs such as housing, resource provision, communication, recreation and so on. Students investigate the distribution and causes of these three processes. They select one location for each of the three processes to develop a greater understanding of the changes to land cover produced by these processes, the impacts of these changes and responses to these changes at different scales. At a local scale students investigate land use change using appropriate fieldwork techniques and secondary sources. They investigate the scale of change, the reasons for change and the impacts of change. Students undertake fieldwork and produce a fieldwork report using the structure provided.

**Outcomes** - On completion of this unit the student should be able to analyse, describe and explain land use change and assess its impacts. They should also be able to analyse, describe and explain processes that result in changes to land cover and discuss the impacts and responses resulting from these changes.

## **GEOGRAPHY 4 – HUMAN POPULATION – TRENDS AND ISSUES**

**Unit Statement** - In this unit students investigate the geography of human populations. They explore the patterns of population change, movement and distribution, and how governments, organisations and individuals have responded to those changes in different parts of the world. In this unit, students study population dynamics before undertaking an investigation into two significant population trends arising in different parts of the world. They examine the dynamics of populations and their economic, social, political and environmental impacts on people and places. The growth of the world's population from 2.5 billion in 1950 to over 7 billion since 2010 has been on a scale without parallel in human history. Much of the current growth is occurring within developing countries while the populations in many developed countries are either growing slowly or are declining.

Populations change by growth and decline in fertility and mortality, and by people moving to different places.

The Demographic Transition Model and population structure diagrams provide frameworks for investigating the key dynamics of population.

Population movements such as voluntary and forced movements over long or short terms add further complexity to population structures and to economic, social, political and environmental conditions. Many factors influence population change, including the impact of government policies, economic conditions, wars and revolution, political boundary changes and hazard events.

**Outcomes** - On completion of this unit the student should be able to analyse, describe and explain population dynamics on a global scale. They should also be able to analyse, describe and explain the nature of significant population issues and challenges in selected locations and evaluate responses.

## **HEALTH AND HUMAN DEVELOPMENT 1 – UNDERSTANDING HEALTH AND WELLBEING**

**Unit Statement** – This unit looks at health and wellbeing as a concept with varied and evolving perspectives and definitions. It takes the view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. As a foundation to the understanding of health, students should investigate the World Health Organization's (WHO) definition and also explore other interpretations. Wellbeing is a complex combination of all dimensions of health, characterised by an equilibrium in which the individual feels happy, healthy, capable and engaged. For the purposes of this study, students should consider wellbeing to be an implicit element of health. In this unit students identify personal perspectives and priorities relating to health and wellbeing, and enquire into factors that influence health attitudes, beliefs and practices, including among Aboriginal and Torres Strait Islanders. Students look at multiple dimensions of health and wellbeing, the complex interplay of influences on health and wellbeing and the indicators used to measure and evaluate health status. With a focus on youth, students consider their own health as individuals and as a cohort. They build health literacy through interpreting and using data, through investigating the role of food, and through extended inquiry into one youth health focus area.

**Outcomes** - On completion of this unit the student should be able to explain multiple dimensions of health and wellbeing, explain indicators used to measure health status and analyse factors that contribute to variations in health status of youth. The student should be able to apply nutrition knowledge and tools to the selection of food and the evaluation of nutrition information. Students should also be able to interpret data to identify key areas for improving youth health and wellbeing, and plan for action by analysing one particular area in detail.

## HEALTH AND HUMAN DEVELOPMENT 2 – MANAGING HEALTH AND DEVELOPMENT

---

**Unit Statement** - This unit investigates transitions in health and wellbeing, and development, from lifespan and societal perspectives. Students look at changes and expectations that are part of the progression from youth to adulthood. This unit promotes the application of health literacy skills through an examination of adulthood as a time of increasing independence and responsibility, involving the establishment of long-term relationships, possible considerations of parenthood and management of health-related milestones and changes. Students enquire into the Australian healthcare system and extend their capacity to access and analyse health information. They investigate the challenges and opportunities presented by digital media and health technologies, and consider issues surrounding the use of health data and access to quality health care.

**Outcomes** - On completion of this unit the student should be able to explain developmental changes in the transition from youth to adulthood, analyse factors that contribute to healthy development during prenatal and early childhood stages of the lifespan and explain health and wellbeing as an intergenerational concept. Students should be able to describe how to access Australia's health system, explain how it promotes health and wellbeing in their local community, and analyse a range of issues associated with the use of new and emerging health procedures and technologies.

## HEALTH AND HUMAN DEVELOPMENT 3 – AUSTRALIA'S HEALTH IN A GLOBALISED WORLD

---

**Unit Statement** - This unit looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students begin to explore health and wellbeing as a global concept and to take a broader approach to inquiry. As they consider the benefits of optimal health and wellbeing and its importance as an individual and a collective resource, their thinking extends to health as a universal right. Students look at the fundamental conditions required for health improvement, as stated by the World Health Organization (WHO). They use this knowledge as background to their analysis and evaluation of variations in the health status of Australians. Area of Study 2 focuses on health promotion and improvements in population health over time. Students look at various public health approaches and the interdependence of different models as they research health improvements and evaluate successful programs. While the emphasis is on the Australian health system, the progression of change in public health approaches should be seen within a global context.

**Outcomes** – On completion of this unit the student should be able to explain the complex, dynamic and global nature of health and wellbeing, interpret and apply Australia's health status data and analyse variations in health status. Students should be able to explain changes to public health approaches, analyse improvements in population health over time and evaluate health promotion strategies.

## HEALTH AND HUMAN DEVELOPMENT 4 – HEALTH AND HUMAN DEVELOPMENT IN A GLOBAL CONTEXT

---

**Unit Statement** - This unit examines health and wellbeing, and human development in a global context. Students use data to investigate health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. Students build their understanding of health in a global context through examining changes in burden of disease over time and studying the key concepts of sustainability and human development. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade and the mass movement of people. Area of Study 2 looks at global action to improve health and wellbeing and human development, focusing on the United Nations' (UN's) Sustainable Development Goals (SDGs) and the work of the World Health Organization (WHO). Students also investigate the role of non-government organisations and Australia's overseas aid program. Students evaluate the effectiveness of health initiatives and programs in a global context and reflect on their capacity to take action.

**Outcomes** - On completion of this unit the student should be able to analyse similarities and differences in health status and burden of disease globally and the factors that contribute to differences in health and wellbeing. Students should be able to analyse relationships between the SDGs and their role in the promotion of health and human development, and evaluate the effectiveness of global aid programs.

## VCE VET COMMUNITY SERVICE

---

**Certificate III in Community Services (incorporating CHC22015 Certificate II in Community Services):** offers students the opportunity to learn about the community services sector and explore specific contexts of work. Skills will be developed in communication, working with diversity, workplace health and safety, administration support, and responding to clients.

### HISTORY 1- TWENTIETH CENTURY HISTORY 1918 –1939

---

**Unit Statement** - In Unit 1 students explore the nature of political, social and cultural change in the period between the world wars.

World War One is regarded by many as marking the beginning of twentieth century history since it represented such a complete departure from the past and heralded changes that were to have an impact for decades to come.

The post-war treaties ushered in a period where the world was, to a large degree, reshaped with new borders, movements, ideologies and power structures. These changes affected developments in Europe, the USA, Asia, Africa and the Middle East. Economic instability caused by the Great Depression also contributed to the development of political movements. Despite ideals about future peace, reflected in the establishment of the League of Nations, the world was again overtaken by war in 1939.

The period after World War One was characterised by significant social and cultural change in the contrasting decades of the 1920s and 1930s. New fascist governments used the military, education and propaganda to impose controls on the way people lived, to exclude particular groups of people and to silence criticism. In Germany, the persecution of the Jewish people became intensified. In the USSR, millions of people were forced to work in state-owned factories and farms and had limited personal freedom. Japan became increasingly militarised and anti-western. In the USA, the consumerism and material progress of the 1920s was tempered by the Great Crash of 1929. Writers, artists, musicians, choreographers and filmmakers reflected, promoted or resisted political, economic and social changes.

**Outcomes** - On completion of this unit the student should be able to explain the consequences of the peace treaties which ended World War One, the impact of ideologies on nations and the events that led to World War Two. They should be able to explain patterns of social life and cultural change in one or more contexts, and analyse the factors which influenced changes to social life and culture, in the inter-war years.

### HISTORY 2- TWENTIETH CENTURY HISTORY 1945 –2000

---

**Unit Statement** - In Unit 2 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 twentieth century.

The establishment of the United Nations in 1945 was intended to take an internationalist approach to avoiding warfare, resolving political tensions and addressing threats to human life and safety. The Universal Declaration of Human Rights adopted in 1948, was the first global expression of human rights.

Despite internationalist moves, the second half of the twentieth century was dominated by the competing ideologies of democracy and communism, setting the backdrop for the Cold War.

This period also saw challenge and change to the established order in many countries. The continuation of moves towards decolonisation led to independence movements in former colonies in Africa, the Middle East, Asia and the Pacific. New countries were created and independence was achieved through both military and diplomatic means. Old conflicts also continued and terrorism became increasingly global. The second half of the twentieth century also saw the rise of social movements that challenged existing values and traditions, such as the civil rights movement, feminism and environmental movements.

**Outcomes** - On completion of this unit the student should be able to explain the ideological divisions in the post-war period and analyse the nature, development and impact of the Cold War on nations and people, in relation to one or more particular conflicts in the period. They should also be able to explain the causes and nature of challenge and change in relation to two selected contexts in the second half of the twentieth century and analyse the consequences for nations and people.

## HISTORY 2- ANCIENT EGYPT

---

**Unit Statement** - Ancient Egypt gave rise to a civilisation that endured for approximately three thousand years. Unlike Mesopotamia, Egypt was not threatened by its neighbours for the greater part of its history. The Nile served as the lifeblood of urban settlements in Upper and Lower Egypt. Kingdoms rose, flourished and fell around the banks of this great river. This unit highlights the importance of primary sources (the material record and written sources) to historical inquiry about Old and Middle Kingdom Egypt.

**Outcomes** - On completion of this unit the student should be able to explain the distribution of power in Old Kingdom Egypt and the First Intermediate Period, the social, political and economic reasons for the construction of pyramids, and Egyptian beliefs concerning the afterlife. Students should be able to explain the use and representation of power in Middle Kingdom Egypt and the Second Intermediate Period.

## AUSTRALIAN HISTORY 3 - TRANSFORMATIONS: COLONIAL SOCIETY TO NATION

---

**Unit Statement** - In this unit students explore the transformation of the Port Phillip District (later Victoria) from the 1830s through to the end of the tumultuous gold rush decade in 1860. They consider the dramatic changes introduced as the British colonisers swiftly established themselves, taking possession of the land and then its newly discovered mineral riches.

Students examine transformations in the way of life of the Aboriginal peoples and to the environment as the European society consolidated itself. They also consider how new visions for the future created by the gold rush and the Eureka rebellion further transformed the new colony.

Students explore the type of society Australians attempted to create in the early years of the newly federated nation. Much of the legislation debated and passed by the Commonwealth Parliament was relatively advanced and Australia was seen as a social laboratory exploring new forms of rights and benefits for its citizens. Students evaluate the effect that Australian involvement in World War One had on the country's egalitarian and socially progressive aspirations.

**Outcomes** - On completion of this unit the student should be able to analyse the nature of change in the Port Phillip District/ Victoria in the period 1834–1860. Students should also be able to analyse the visions and actions that shaped the new nation from 1890 to 1920, and the changes and continuities to these visions that resulted from participation in World War One.

## AUSTRALIAN HISTORY 4 - AUSTRALIAN HISTORY

---

**Unit Statement** - In this unit students investigate the continuing development of the nation in the early part of the twentieth century and the dramatic changes that occurred in the latter part of the century. After World War One the process of nation building was renewed. However, world events soon intruded again into the lives of all Australians. The economic crisis of the 1930s followed by another world war redirected the nation's priorities for a time as it struggled to regain economic stability and defeat its military enemies. The experience of both the Depression and World War Two gave rise to renewed thinking by Australians about how to achieve the type of society envisaged at the time of Federation. In Area of Study 1 students focus on one of the crises faced by the nation: The Great Depression

1929 –1939 or World War Two 1939 –1945.

In Area of Study 2 students explore social, economic and political changes in the latter part of the twentieth century that collectively challenged and/or overturned much of Australia's earlier carefully constructed social and economic fabric. Students examine two changes drawn from: Australia's involvement in the Vietnam War, Aboriginal land rights, equality for women, new patterns of immigration and/or a global economy.

**Outcomes** - On completion of this unit the student should be able to analyse the social, economic and political consequences of a crisis on the nation. Students should also be able to analyse and evaluate two key social, economic and political changes in late twentieth century Australia.

## HISTORY – REVOLUTIONS 3 & 4

---

**Unit Statement** - In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point which brings about the collapse and destruction of an existing political order resulting in a pervasive change to society. Revolutions are caused by the interplay of ideas, events, individuals and popular movements. Their consequences have a profound effect on the political and social structures of the post-revolutionary society. Revolution is a dramatically accelerated process whereby the new order attempts to create political and social change and transformation based on a new ideology. Progress in a post-revolutionary society is not guaranteed or inevitable. Post-revolutionary regimes are often threatened internally by civil war and externally by foreign threats. These challenges can result in a compromise of revolutionary ideals and extreme measures of violence, oppression and terror. 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. They consider how perspectives of the revolution give an insight into the continuity and change experienced by those who lived through dramatic revolutionary moments. Students evaluate historical interpretations about the causes and consequences of revolution and the effects of change instigated by the new order.

The periods considered in this course are the French Revolution of 1789 and the Russian Revolution of October 1917.

**Outcome** - On completion of this unit the student should be able to analyse the causes of revolution, and evaluate the contribution of significant ideas, events, individuals and popular movements. They should also be able to analyse the consequences of revolution and evaluate the extent of change brought to society.

## INDONESIAN 1

---

**Unit Statement** - In this unit students develop an understanding of the language and culture/s of Indonesian-speaking communities through the study of three or more topics from the prescribed themes listed on page 11 of the study design. Each area of study in the unit must focus on a different subtopic. Students access and share useful information on the topics and subtopics through Indonesian and consolidate and extend vocabulary and grammar knowledge and language skills. They focus on analysing cultural products or practices including visual, spoken or written texts. Students reflect on the interplay between language and culture, and its impact on the individual's language use in specific contexts and for specific audiences.

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

**Outcomes** – On completion of this unit students should be able to exchange meaning in a spoken interaction in Indonesian, interpret information from two texts on the same subtopic presented in Indonesian, and respond in writing in Indonesian and in English. They should be able to present information, concepts and ideas in writing in Indonesian on the selected subtopic and for a specific audience and purpose.

## INDONESIAN 2

---

**Unit Statement** - In this unit students develop an understanding of aspects of language and culture through the study of three or more topics from the prescribed themes listed on page 11 of the study design. Each area of study must focus on a different subtopic. Students analyse visual, spoken and written texts. They access and share useful information on the topics and subtopics through Indonesian and consolidate and extend vocabulary, grammar knowledge and language skills.

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

**Outcomes** – On the completion of this unit students should be able to respond in writing in Indonesian to spoken, written or visual texts presented in Indonesian, analyse and use information from written, spoken or visual texts to produce an extended written response in Indonesian. They should be able to explain information, ideas and concepts orally in Indonesian to a specific audience about an aspect of culture within communities where Indonesian is spoken.

## INDONESIAN 3

---

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

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

**Outcomes** – On the completion of this unit students should be able to participate in a spoken exchange in Indonesian to resolve a personal issue, interpret information from texts and write responses in Indonesian, as well as express ideas in a personal, informative or imaginative piece of writing in Indonesian.

## INDONESIAN 4

---

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

**Content Outline** - Students identify and reflect on cultural products or practices that provide insights into Indonesian-speaking communities. Cultural products or practices can be drawn from a diverse range of texts, activities and creations. Students reflect on the ways culture, place and time influence values, attitudes and behaviours. They consider how knowledge of more than one culture can influence the ways individuals relate to each other and function in the world.

**Outcomes** – On the completion of this unit students should be able to share information, ideas and opinions in a spoken exchange in Indonesian, analyse information from written, spoken and viewed texts for use in a written response in Indonesian, as well as present information, concepts and ideas in evaluative or persuasive writing on an issue in Indonesian.

## LEGAL STUDIES 1 - GUILT AND LIABILITY

---

**Unit Statement** - Criminal law and civil law aim to achieve social cohesion and protect the rights of individuals. Criminal law is aimed at maintaining social order and infringing criminal law can result in charges. Civil law deals with the infringement of a person's or group's rights and breaching civil law can result in litigation.

In this unit students develop an understanding of legal foundations, such as the different types and sources of law and the existence of a court hierarchy in Victoria. Students investigate key concepts of criminal law and civil law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime, or liable in a civil dispute. In doing so, students develop an appreciation of the way in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused, and the liability of a party in a civil dispute.

**Throughout this unit, will be exposed to justice in action through court and prison visits, guest speakers and the opportunity to take part in simulated/mock/moot courts.**

**Outcomes** - On completion of this unit the student should be able to describe the main sources and types of law, and assess the effectiveness of laws. Students should be able to explain the purposes and key concepts of criminal law, and use legal reasoning to argue the criminal culpability of an accused based on actual and/or hypothetical scenarios. Students should also be able to explain the purposes and key concepts of civil law, and apply legal reasoning to argue the liability of a party in civil law based on actual and/or hypothetical scenarios.

## LEGAL STUDIES 2 – SANCTIONS, REMEDIES AND RIGHTS

**Unit Statement** - Criminal law and civil law aim to protect the rights of individuals. When rights are infringed, a case or dispute may arise which needs to be determined or resolved, and sanctions or remedies may be imposed. This unit focuses on the enforcement of criminal law and civil law, the methods and institutions that may be used to determine a criminal case or resolve a civil dispute, and the purposes and types of sanctions and remedies and their effectiveness. Students undertake a detailed investigation of two criminal cases and two civil cases from the past four years to form a judgment about the ability of sanctions and remedies to achieve the principles of justice. Students develop their understanding of the way rights are protected in Australia and in another country, and possible reforms to the protection of rights. They examine a significant case in relation to the protection of rights in Australia.

**Throughout this unit, will be exposed to justice in action through court and prison visits, guest speakers and the opportunity to take part in simulated/mock/moot courts.**

**Outcomes** - On completion of this unit the student should be able to explain key concepts in the determination of a criminal case, and discuss the principles of justice in relation to the determination of criminal cases, sanctions and sentencing approaches. Students should be able to 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. Students should also be able to evaluate the ways in which rights are protected in Australia, compare this approach with that adopted by another country and discuss the impact of an Australian case on the rights of individuals and the legal system.

## LEGAL STUDIES 3 – RIGHTS AND JUSTICE

**Unit Statement** - The Victorian justice system, which includes the criminal and civil justice systems, aims to protect the rights of individuals and uphold the principles of justice: fairness, equality and access. In this unit students examine the methods and institutions in the justice system and consider their appropriateness in determining criminal cases and resolving civil disputes. Students consider the Magistrates' Court, County Court and Supreme Court within the Victorian court hierarchy, as well as other Victorian legal institutions and bodies available to assist with cases such as VCAT and Consumer Affairs Victoria.

Students explore matters such as the rights available to an accused and to victims in the criminal justice system, the roles of the judge, jury, legal practitioners and the parties, and the ability of sanctions(criminal) and remedies(civil) to achieve their purposes. Students investigate the extent to which the principles of justice are upheld in the justice system.

They discuss recent reforms from the past four years and recommended reforms to enhance the ability of the justice system to achieve the principles of justice.

**Throughout this unit, will be exposed to justice in action through court and prison visits, guest speakers and the opportunity to take part in simulated/mock/moot courts.**

**Outcomes** - On completion of this unit the student should be able to 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. Students should be able to 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.

## LEGAL STUDIES 4 – THE PEOPLE AND THE LAW

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

**Throughout this unit, will be exposed to justice in action through court and prison visits, guest speakers and the opportunity to take part in simulated/mock/moot courts.**

**Outcomes** - On completion of this unit the student should be able to 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. Students should be able to discuss the factors that affect the ability of parliament and courts to make law, evaluate the ability of these law-makers 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.

## LITERATURE 1 APPROACHES TO LITERATURE

---

**Unit Statement** - In this unit students focus on the ways in which the interaction between text and reader creates meaning. Students' analyses of the features and conventions of texts help them develop increasingly discriminating responses to a range of literary forms and styles. Students respond critically, creatively and reflectively to the ideas and concerns of texts and gain insights into how texts function as representations of human experience. They develop familiarity with key terms, concepts and practices that equip them for further studies in literature. They develop an awareness of how the views and values that readers hold may influence the reading of a text.

**Outcomes** - On completion of this unit the student should be able to respond to a range of texts and reflect on influences shaping these responses and be able to analyse the ways in which a selected text reflects or comments on the ideas and concerns of individuals and particular groups in society.

## LITERATURE 2 CONTEXT AND CONNECTIONS

**Unit Statement** - In this unit students explore the ways literary texts connect with each other and with the world. They deepen their examination of the ways their own culture and the cultures represented in texts can influence their interpretations and shape different meanings. Drawing on a range of literary texts, students consider the relationships between authors, audiences and contexts. Ideas, language and structures of different texts from past and present eras and/or cultures are compared and contrasted. Students analyse the similarities and differences across texts and establish connections between them. They engage in close reading of texts and create analytical responses that are evidence-based. By experimenting with textual structures and language features, students understand how imaginative texts are informed by close analysis.

**Outcomes** - On completion of this unit the student should be able to analyse and respond critically and creatively to the ways a text from a past era and/or a different culture reflect or comment on the ideas and concerns of individuals and groups in that context and be able to compare texts considering the dialogic nature of texts and how they influence each other.

## LITERATURE 3 FORM AND TRANSFORMATION

---

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

**Outcomes** - On completion of this unit the student should be able to analyse the extent to which meaning changes when a text is adapted to a different form. Students should be able to respond creatively to a text and comment on the connections between the text and the response.

## LITERATURE 4 INTERPRETING TEXTS

---

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

**Outcomes**- On completion of this unit students should be able to produce an interpretation of a text using different literary perspectives to inform their view. Students should be able to analyse features of texts and develop and justify interpretations of texts.

## FOUNDATION MATHS 1 & 2

---

**Unit Statement** - Foundation Mathematics provides for the continuing mathematical development of students entering VCE and who do not necessarily intend to undertake Unit 3 and 4 studies in VCE Mathematics in the following year. This course is designed to complement General Mathematics and Mathematical Methods. Students completing this course would need to undertake additional targeted mathematical study in order to attempt Further Mathematics Units 3 and 4. In Foundation Mathematics there is a strong emphasis on the use of mathematics in practical contexts encountered in everyday life in the community, at work and at study. The areas of study for Units 1 and 2 of Foundation Mathematics are 'Space, shape and design', 'Patterns and number', 'Data' and 'Measurement'.

All four areas of study are to be completed over the two units. The content should be developed using contexts present in students' other studies, work and personal or other familiar situations.

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

**These units DO NOT lead to any further units of VCE Maths.**

**Outcomes** - On completion of this unit the student should be able to use and apply a range of mathematical concepts, skills and procedures from selected areas of study to solve problems based on a range of everyday and real-life contexts. The student should be able to apply mathematical procedures to solve practical problems in both familiar and new contexts, and communicate their results and be able to select and use technology to solve problems in practical contexts.

**Extra Requirement** - Scientific Calculator, Excursion x 2

## SPECIALIST MATHS 1 & 2

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

Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Units 3 and 4. The areas of study for Units 1 and 2 of Specialist Mathematics are 'Algebra and structure', 'Arithmetic and number', 'Discrete mathematics', 'Geometry, measurement and trigonometry', 'Graphs of linear and non-linear relations' and 'Statistics'.

**Outcomes** - On completion of this unit the student should be able to define and explain key concepts in relation to the topics from the selected areas of study, and apply a range of related mathematical routines and procedures. Students should also be able to apply mathematical processes in non-routine contexts, and analyse and discuss these applications of mathematics in at least three areas of study.

To achieve this outcome the student will draw on knowledge and skills outlined in at least three areas of study.

## GENERAL MATHS 1 & 2

---

**Unit Statement**- General Mathematics provides for different combinations of student interests and preparation for study of VCE Mathematics at the Unit 3 and 4 level. The areas of study for General Mathematics Unit 1 and Unit 2 are 'Algebra and structure', 'Arithmetic and number', 'Discrete mathematics', 'Geometry, measurement and trigonometry', 'Graphs of linear and non-linear relations' and 'Statistics'. In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, 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.

**Outcomes**- On completion of this unit the student should be able to define and explain key concepts in relation to the topics from the selected areas of study, and apply a range of related mathematical routines and procedures.

## MATHEMATICAL METHODS 1

**Unit Statement** - Mathematical Methods Units 1 and 2 provide an introductory study of simple elementary functions of a single real variable, algebra, calculus, probability and statistics and their applications in a variety of practical and theoretical contexts. They are designed as preparation for Mathematical Methods Units 3 and 4 and contain assumed knowledge and skills for these units. The focus of Unit 1 is the study of simple algebraic functions, and the areas of study are 'Functions and graphs', 'Algebra', 'Calculus' and 'Probability and statistics'. At the end of Unit 1, students are expected to have covered the content outlined in each area of study, with the exception of 'Algebra' which extends across Units 1 and 2. This content should be presented so that there is a balanced and progressive development of skills and knowledge from each of the four areas of study with connections between and across the areas of study being developed consistently throughout both Units 1 and 2. In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs and differentiation with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the unit as applicable.

**Outcomes** – On completion of this unit the student should be able to define and explain key concepts as specified in the content from the areas of study, and apply a range of related mathematical routines and procedures. They should also be able to apply mathematical processes in non-routine contexts, including situations requiring problem-solving, modelling or investigative techniques or approaches, and analyse and discuss these applications of mathematics. Students should be able to use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

## MATHEMATICAL METHODS 2

**Unit Statement** - In Unit 2 students focus on the study of simple transcendental functions and the calculus of simple algebraic functions. The areas of study are 'Functions and graphs', 'Algebra', 'Calculus', and 'Probability and statistics'. At the end of Unit 2, students are expected to have covered the material outlined in each area of study. Material from the 'Functions and graphs', 'Algebra', 'Calculus', and 'Probability and statistics' areas of study should be organised so that there is a clear progression of skills and knowledge from Unit 1 to Unit 2 in each area of study. In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs, differentiation and anti-differentiation with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the unit as applicable.

**Outcomes** – On completion of this unit the student should be able to define and explain key concepts as specified in the content from the areas of study, and apply a range of related mathematical routines and procedures. Students should also be able to apply mathematical processes in non-routine contexts, including situations requiring problem-solving, modelling or investigative techniques or approaches, and analyse and discuss these applications of mathematics. Students should be able to select and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

## MATHEMATICAL METHODS 3 & 4

**Unit Statement** - 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 'Functions and graphs', 'Calculus', 'Algebra' and 'Probability and statistics', which must be covered in progression from Unit 3 to Unit 4, with an appropriate selection of content for each of Unit 3 and Unit 4. Assumed knowledge and skills for Mathematical Methods Units 3 and 4 are contained in Mathematical Methods Units 1 and 2, and will be drawn on, as applicable, in the development of related content from the areas of study, and key knowledge and skills for the outcomes of Mathematical Methods Units 3 and 4.

For Unit 3 a selection of content would typically include the areas of study 'Functions and graphs' and 'Algebra', and applications of derivatives and differentiation, and identifying and analysing key features of the functions and their graphs from the 'Calculus' area of study. For Unit 4, this selection would typically consist of remaining content from the areas of study: 'Functions and graphs', 'Calculus' and 'Algebra', and the study of random variables and discrete and continuous probability distributions and the distribution of sample proportions. For Unit 4, the content from the 'Calculus' area of study would be likely to include the treatment of anti-differentiation, integration, the relation between integration and the area of regions specified by lines or curves described by the rules of functions, and simple applications of this content.

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

**Outcomes** – On completion of each unit the student should be able to define and explain key concepts as specified in the content from the areas of study, and apply a range of related mathematical routines and procedures. Students should also be able to apply mathematical processes in non-routine contexts, including situations requiring problem-solving, modelling or investigative techniques or approaches, and analyse and discuss these applications of mathematics. Students should be able to select and appropriately use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

## FURTHER MATHS 3 & 4

**Unit Statement** - Further Mathematics consists of two areas of study, a compulsory Core area of study to be completed in Unit 3 and an Applications area of study to be completed in Unit 4. The Core comprises 'Data analysis' and 'Recursion and financial modelling'. The Applications comprises two modules to be completed in their entirety, from a selection of four possible modules: 'Matrices', 'Networks and decision mathematics', 'Geometry and measurement' and 'Graphs and relations'. 'Data analysis' comprises 40 per cent of the content to be covered, 'Recursion and financial modelling' comprises 20 per cent of the content to be covered, and each selected module comprises 20 per cent of the content to be covered. Assumed knowledge and skills for the Core are contained in the General Mathematics Units 1 and 2 topics: 'Computation and practical arithmetic', 'Investigating and comparing data distributions', 'Investigating relationships between two numerical variables', 'Linear graphs and modelling', 'Linear relations and equations', and 'Number patterns and recursion'. For each module there are related topics in General Mathematics Units 1 and 2.

**Outcomes** - On completion of this unit the student should be able to define and explain key concepts and apply related mathematical techniques and models in routine contexts. Students should also be able to select and apply the mathematical concepts, models and techniques in a range of contexts of increasing complexity. Students should be able to select and appropriately use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

## SPECIALIST MATHEMATICS 3 & 4

---

**Unit Statement** - Specialist Mathematics Units 3 and 4 consist of the areas of study: 'Functions and graphs', 'Algebra', 'Calculus', 'Vectors', 'Mechanics' and 'Probability and statistics'. The development of course content should highlight mathematical structure, reasoning 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 skills from Mathematical

Methods Units 1 and 2, the key knowledge and skills from Specialist Mathematics Units 1 and 2 topics 'Number systems and recursion' and 'Geometry in the plane and proof', and concurrent or previous study of Mathematical Methods Units 3 and 4. Together these cover the assumed knowledge and skills for Specialist Mathematics, which are drawn on as applicable in the development of content from the areas of study and key knowledge and skills for the outcomes. In Unit 3 a study of Specialist Mathematics would typically include content from 'Functions and graphs' and a selection of material from the 'Algebra', 'Calculus' and 'Vectors' areas of study. In Unit 4 this selection would typically consist of the remaining content from the 'Algebra', 'Calculus', and 'Vectors' areas of study and the content from the 'Mechanics' and 'Probability and statistics' areas of study.

**Outcomes** - On the completion of each unit the student should be able to define and explain key concepts as specified in the content from the areas of study, and apply a range of related mathematical routines and procedures. Students should also be able to apply mathematical processes, with an emphasis on general cases, in non-routine contexts, and analyse and discuss these applications of mathematics. Students should be able to select and appropriately use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

## MEDIA 1 - MEDIA FORMS, REPRESENTATIONS AND AUSTRALIAN STORIES

---

**Unit Statement** - The relationship between audiences and the media is dynamic and changing. Audiences engage with media products in many ways. They share a common language with media producers and construct meanings from the representations within a media product. In this unit students develop an understanding of audiences and the core concepts underpinning the construction of representations and meaning in different media forms. They explore media codes and conventions and the construction of meaning in media products.

Students analyse how representations, narrative and media codes and conventions contribute to the construction of the media realities audiences engage with and read. Students gain an understanding of audiences as producers and consumers of media products. Through analysing the structure of narratives, students consider the impact of media creators and institutions on production. They develop research skills to investigate and analyse selected narratives focusing on the influence of media professionals on production genre and style. Students develop an understanding of the features of Australian fictional and non-fictional narratives in different media forms.

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

**Outcomes** - On completion of this unit the student should be able to explain how media representations in a range of media products and forms, and from different periods of time, locations and contexts, are constructed, distributed, engaged with, consumed and read by audiences. Students should be able to use the media production process to design, produce and evaluate media representations for specified audiences in a range of media forms. Students should also be able to analyse how the structural features of Australian fictional and non-fictional narratives in two or more media forms engage, and are consumed and read by, audiences.

## **MEDIA 2 - NARRATIVE ACROSS MEDIA FORMS**

---

**Unit Statement** - Fictional and non-fictional narratives are fundamental to the media and are found in all media forms. Media industries such as journalism and filmmaking are built upon the creation and distribution of narratives constructed in the form of a series of interconnected images and/or sounds and/or words, and using media codes and conventions. New media forms and technologies enable participants to design, create and distribute narratives in hybrid forms such as collaborative and user-generated content, which challenges the traditional understanding of narrative form and content. Narratives in new media forms have generated new modes of audience engagement, consumption and reception. In this unit students further develop an understanding of the concept of narrative in media products and forms in different contexts. Narratives in both traditional and newer forms include film, television, sound, news, print, photography, games, and interactive digital forms. Students analyse the influence of developments in media technologies on individuals and society, examining in a range of media forms the effects of media convergence and hybridisation on the design, production and distribution of narratives in the media and audience engagement, consumption and reception.

Students undertake production activities to design and create narratives that demonstrate an awareness of the structures and media codes and conventions appropriate to corresponding media forms.

**Outcomes** - On completion of this unit the student should be able to analyse the intentions of media creators and producers and the influences of narratives on the audience in different media forms. Students should be able to apply the media production process to create, develop and construct narratives. Students should also be able to discuss the influence of new media technologies on society, audiences, the individual, media industries and institutions.

## **MEDIA 3 - MEDIA NARRATIVES AND PRE-PRODUCTION**

---

**Unit Statement** - In this unit students explore stories that circulate in society through media narratives. They consider the use of media codes and conventions to structure meaning, and how this construction is influenced by the social, cultural, ideological and institutional contexts of production, distribution, consumption and reception. Students assess how audiences from different periods of time and contexts are engaged by, consume and read narratives using appropriate media language. Narratives are defined as the depiction of a chain of events in a cause and effect relationship occurring in physical and/or virtual space and time in non-fictional and fictional media products.

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

**Outcomes** - On completion of this unit the student should be able to analyse how narratives are constructed and distributed, and how they engage, are consumed and are read by the intended audience and present day audiences. Students should be able to research aspects of a media form and experiment with media technologies and media production processes to inform and document the design of a media production. Students also should be able to develop and document a media production design in a selected media form for a specified audience.

## **MEDIA 4 - MEDIA PRODUCTION AND ISSUES IN THE MEDIA**

---

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

Students explore the relationship between the media and audiences, focusing on the opportunities and challenges afforded by current developments in the media industry. They consider the nature of communication between the media and audiences, explore the capacity of the media to be used by governments, institutions and audiences, and analyse the role of the Australian government in regulating the media.

**Outcomes** - On completion of this unit the student should be able to produce, refine and resolve a media product designed in Unit 3. Students should be able to discuss issues of agency and control in the relationship between the media and its audience.

## VCE VET MUSIC (SA)

---

### **Certificate III in Music Industry**

**Music Performance Specialisation:** provides students with the opportunity to apply a broad range of knowledge and skills in varied work contexts in the music industry. Depending on the electives chosen, Units 1 and 2 include making a music demo, composing simple songs or musical pieces and preparing for performances. Units 3 and 4 offer scored assessment and include units such as developing improvisation skills, applying knowledge of genre to music making and performing music as part of a group or as a soloist.

## OUTDOOR & ENVIRONMENTAL STUDIES 1 – EXPLORING OUTDOOR EXPERIENCES

---

**Unit Statement** - This unit examines 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 are provided with the opportunity to explore the many ways in which nature is understood and perceived. Students develop a clear understanding of the range of motivations for interacting with outdoor environments and the factors that affect an individual's access to outdoor experiences and relationships with outdoor environments. Through outdoor experiences, students develop practical skills and knowledge to help them live sustainably in outdoor environments. Students understand the links between practical experiences and theoretical investigations, gaining insight into a variety of responses to, and relationships with, nature.

**Outcomes** - On completion of this unit the student should be able to analyse motivations for participation in and responses to outdoor environments and be able to participate safely in specific outdoor experiences. Students should be able to explain factors that influence outdoor experiences and plan for sustainable interactions with outdoor environments while participating in practical experiences.

*\*\* This subject has a camp that all students are expected to go on. There will be a cost associated with this camp.*

## OUTDOOR & ENVIRONMENTAL STUDIES 2 – DISCOVERING OUTDOOR ENVIRONMENTS

---

**Unit Statement** - This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the impact of humans on outdoor environments.

In this unit students study the impact of nature on humans, and the ecological, social and economic implications of the impact of humans on outdoor environments. Students develop a clear understanding of the impact of technologies and changing human lifestyles on outdoor environments.

Students examine a number of case studies of specific outdoor environments, including areas where there is evidence of human intervention. They develop the practical skills required to minimise the impact of humans on outdoor environments. Through practical experiences students are able to make comparisons between and to reflect upon outdoor environments, as well as to develop theoretical knowledge about natural environments.

**Outcomes** - On completion of this unit the student should be able to describe the characteristics of different outdoor environments and analyse a range of understandings of these environments, with reference to specific outdoor experiences. Students should be able to evaluate the impacts of humans on outdoor environments and analyse practices for promoting positive impacts, with reference to specific outdoor experiences.

*\*\* This subject has a camp that all students are expected to go on. There will be a cost associated with this camp.*

## OUTDOOR & ENVIRONMENTAL STUDIES 3 – RELATIONSHIPS WITH OUTDOOR ENVIRONMENTS

---

**Unit Statement** - The focus of this unit is the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. Case studies of a range of impacts on outdoor environments are examined in the context of the changing nature of human relationships with outdoor environments in Australia.

Students consider a number of factors that influence relationships with outdoor environments. They also examine the dynamic nature of relationships between humans and their environment.

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

**Outcomes** - On completion of this unit the student should be able to explain and evaluate how relationships with Australian outdoor environments have changed over time, with reference to specific outdoor experiences.

Students should be able to analyse and evaluate the factors influencing societal relationships with outdoor environments since 1990, with reference to specific outdoor experiences.

*\*\* This subject has a camp that all students are expected to go on. There will be a cost associated with this camp.*

## **OUTDOOR & ENVIRONMENTAL STUDIES 4 – SUSTAINABLE OUTDOOR RELATIONSHIPS**

---

**Unit Statement** - In this unit students explore the sustainable use and management of outdoor environments. They examine the contemporary state of environments in Australia, consider the importance of healthy outdoor environments, and examine the issues relating to the capacity of outdoor environments to support the future needs of the Australian population.

Students examine the importance of developing a balance between human needs and the conservation of outdoor environments and consider the skills needed to be environmentally responsible citizens. They investigate current acts and conventions as well as management strategies for achieving and maintaining healthy and sustainable environments in contemporary Australian society.

Students engage in one or more related experiences in outdoor environments. They learn and apply the practical skills and knowledge required to sustain healthy outdoor environments, and evaluate the strategies and actions they employ. Through these practical experiences students are able to make comparisons between and to reflect upon outdoor environments, as well as to develop and apply theoretical knowledge about outdoor environments.

**Outcomes** - On completion of this unit the student should be able to evaluate the contemporary state of Australian outdoor environments and analyse the importance of healthy outdoor environments and sustainability for individuals and society, with reference to specific outdoor experiences. Students should be able to analyse conflicts over the use of outdoor environments, and evaluate practices and strategies for sustaining outdoor environments, with reference to specific outdoor experiences.

*\*\* This subject has a camp that all students are expected to go on. There will be a cost associated with this camp.*

## **PHYSICAL EDUCATION 1 – THE HUMAN BODY IN MOTION**

---

**Unit Statement** - In this unit 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.

Using a contemporary approach, students evaluate the social, cultural and environmental influences on movement. They consider the implications of the use of legal and illegal practices to improve the performance of the musculoskeletal and cardiorespiratory systems, evaluating perceived benefits and describing potential harms.

They also recommend and implement strategies to minimise the risk of illness or injury to each system.

**Outcomes** - On completion of this unit students should be able to collect and analyse information from, and participate in, a variety of practical activities to explain how the musculoskeletal system functions and its limiting conditions, and evaluate the ethical and performance implications of the use of practices and substances that enhance human movement. Students should be able to collect and analyse information from, and participate in, a variety of practical activities to explain how the cardiovascular and respiratory systems function and the limiting conditions of each system, and discuss the ethical and performance implications of the use of practices and substances to enhance the performance of these two systems.

## PHYSICAL EDUCATION 2 – PHYSICAL ACTIVITY, SPORT AND SOCIETY

---

**Unit Statement** - This unit 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. Through a series of practical activities, students experience and explore different types of physical activity promoted in their own and different population groups. They gain an appreciation of the level of physical activity required for health benefits. Students investigate how participation in physical activity varies across the lifespan. They explore a range of factors that influence and facilitate participation in regular physical activity. They collect data to determine perceived enablers of and barriers to physical activity and the ways in which opportunities for participation in physical activity can be extended in various communities, social, cultural and environmental contexts. Students investigate individual and population-based consequences of physical inactivity and sedentary behaviour. They then create and participate in an activity plan that meets the physical activity and sedentary behaviour guidelines relevant to the particular population group being studied. Students apply various methods to assess physical activity and sedentary behaviour levels at the individual and population level, and analyse the data in relation to physical activity and sedentary behaviour guidelines. Students study and apply the social-ecological model and/or the Youth Physical Activity Promotion Model to critique a range of individual- and settings-based strategies that are effective in promoting participation in some form of regular physical activity.

**Outcomes**- On completion of this unit the student should be able to collect and analyse data related to individual and population levels of participation in physical activity and sedentary behaviour to create, undertake and evaluate an activity plan that meets the physical activity and sedentary behaviour guidelines for an individual or a specific group. Students should be able to apply a social-ecological framework to research, analyse and evaluate a contemporary issue associated with participation in physical activity and/or sport in a local, national or global setting.

## PHYSICAL EDUCATION 3 – MOVEMENT SKILLS AND ENERGY FOR PHYSICAL ACTIVITY

---

**Unit Statement** - This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and 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 correct application of these principles can lead to improved performance in physical activity and sport.

Students investigate the relative contribution and interplay of the three energy systems to performance in physical activity, sport and exercise. In particular, they investigate the characteristics of each system and the interplay of the systems during physical activity. Students explore the causes of fatigue and consider different strategies used to postpone fatigue and promote recovery.

**Outcomes** – On completion of this unit the student should be able to collect and analyse information from, and participate in, a variety of physical activities to develop and refine movement skills from a coaching perspective, through the application of biomechanical and skill acquisition principles. Students should be able to use data collected in practical activities to analyse how the major body and energy systems work together to enable movements to occur, and explain the factors causing fatigue and suitable recovery strategies.

## PHYSICAL EDUCATION 4 – TRAINING TO IMPROVE PERFORMANCE

---

**Unit Statement** - In this unit students analyse movement skills from a physiological, psychological and sociocultural perspective, and apply relevant training principles and methods to improve performance within physical activity at an individual, club and elite level. Improvements in performance, in particular fitness, depend on the ability of the individual and/ or coach to gain, apply and evaluate knowledge and understanding of training. Students analyse skill frequencies, movement patterns, heart rates and work to rest ratios to determine the requirements of an activity. Students consider the physiological, psychological and sociological requirements of training to design and evaluate an effective training program.

Students participate in a variety of training sessions designed to improve or maintain fitness and evaluate the effectiveness of different training methods. Students critique the effectiveness of the implementation of training principles and methods to meet the needs of the individual, and evaluate the chronic adaptations to training from a theoretical perspective

**Outcomes** – On completion of this unit the student should be able to analyse data from an activity analysis and fitness tests to determine and assess the fitness components and energy system requirements of the activity. Students should be able to participate in a variety of training methods, and design and evaluate training programs to enhance specific fitness components.

## VCE VET HEALTH SUPPORT SERVICES

---

**Certificate II in Health Support Services:** provides students with the knowledge and skills to enhance their employment prospects in the Health industry. This is an entry level qualification which covers workers who provide support for the effective functioning of health services. Specialisations in Client Support or Health Administration are available.

## VCE VET SPORT AND RECREATION

---

**Certificate III in Sport and Recreation:** provides students with the skills and knowledge to work in the Sport and Recreation industry. In Units 1 and 2, students can choose from a range of electives to create a program of their choice, including sport specific activities, conducting events, outdoor recreation or fitness programs. Units 3 and 4 offers scored assessment and includes core units such as conduct basic warm-up and cool-down programs, plan and conduct programs, risk assessment, and control and knowledge of coaching practices.

### PHYSICS 1- WHAT IDEAS EXPLAIN THE PHYSICAL WORLD?

**Unit Statement** - Ideas in physics are dynamic. As physicists explore concepts, theories evolve. Often this requires the detection, description and explanation of things that cannot be seen. In this unit students explore how physics explains phenomena, at various scales, which are not always visible to the unaided human eye. They examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain the world. Students consider thermal concepts by investigating heat, probe common analogies used to explain electricity and consider the origins and formation of matter. Students use thermodynamic principles to explain phenomena related to changes in thermal energy. They apply thermal laws when investigating energy transfers within and between systems, and assess the impact of human use of energy on the environment. Students examine the motion of electrons and explain how it can be manipulated and utilised. They explore current scientifically accepted theories that explain how matter and energy have changed since the origins of the Universe.

**Outcomes** – On completion of this unit the student should be able to apply thermodynamic principles to analyse, interpret and explain changes in thermal energy in selected contexts, and describe the environmental impact of human activities with reference to thermal effects and climate science concepts. They should also be able to investigate and apply a basic DC circuit model to simple battery-operated devices and household electrical systems, apply mathematical models to analyse circuits, and describe the safe and effective use of electricity by individuals and the community and be able explain the origins of atoms, the nature of subatomic particles and how energy can be produced by atoms.

### PHYSICS 2- WHAT DO EXPERIMENTS REVEAL ABOUT THE PHYSICAL WORLD?

**Unit Statement** - In this unit students explore the power of experiments in developing models and theories. They investigate a variety of phenomena by making their own observations and generating questions, which in turn lead to experiments. Students make direct observations of physics phenomena and examine the ways in which phenomena that may not be directly observable can be explored through indirect observations.

In the core component of this unit students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary. Students choose one of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound and sports science. The option enables students to pursue an area of interest by investigating a selected question.

Students design and undertake investigations involving at least one independent, continuous variable.

**Outcomes** - On completion of this unit the student should be able to investigate, analyse and mathematically model the motion of particles and bodies. They should also be able to demonstrate understanding of their chosen area of interest. Students should be able to design and undertake an investigation of a physics question related to the scientific inquiry processes of data collection and analysis, and draw conclusions based on evidence from collected data.

## PHYSICS 3 HOW DO FIELDS EXPLAIN MOTION AND ELECTRICITY?

**Unit Statement** - In this unit students explore the importance of energy in explaining and describing the physical world. They examine the production of electricity and its delivery to homes. Students consider the field model as a construct that has enabled an understanding of why objects move when they are not apparently in contact with other objects. Applications of concepts related to fields include the transmission of electricity over large distances and the design and operation of particle accelerators. They explore the interactions, effects and applications of gravitational, electric and magnetic fields. Students use Newton's laws to investigate motion in one and two dimensions, and are introduced to Einstein's theories to explain the motion of very fast objects. They consider how developing technologies can challenge existing explanations of the physical world, requiring a review of conceptual models and theories. Students design and undertake investigations involving at least two continuous independent variables. **Outcomes** - On completion of this unit the student should be able to analyse gravitational, electric and magnetic fields, and use these to explain the operation of motors and particle accelerators and the orbits of satellites. Students should be able to analyse and evaluate an electricity generation and distribution system. Students should also be able to investigate motion and related energy transformations experimentally, analyse motion using Newton's laws of motion in one and two dimensions, and explain the motion of objects moving at very large speeds using Einstein's theory of special relativity.

## PHYSICS 4 HOW CAN TWO CONTRADICTORY MODELS EXPLAIN BOTH LIGHT AND MATTER?

**Unit Statement** - A complex interplay exists between theory and experiment in generating models to explain natural phenomena including light. Wave theory has classically been used to explain phenomena related to light; however, continued exploration of light and matter has revealed the particle-like properties of light. On very small scales, light and matter – which initially seem to be quite different – have been observed as having similar properties. In this unit, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and explore its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour. A wave model is also used to explain the behaviour of matter which enables students to consider the relationship between light and matter. Students learn to think beyond the concepts experienced in everyday life to study the physical world from a new perspective. Students design and undertake investigations involving at least two continuous independent variables. **Outcomes** - On completion of this unit the student should be able to apply wave concepts to analyse, interpret and explain the behaviour of light. Students should be able to provide evidence for the nature of light and matter, and analyse the data from experiments that supports this evidence. Students should also be able to design and undertake a practical investigation related to waves or fields or motion, and present methodologies, findings and conclusions in a scientific poster.

## PRODUCT DESIGN & TECHNOLOGY 1 – SUSTAINABLE PRODUCT REDEVELOPMENT

**Unit Statement** - This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability.

It is common for designers in Australia to use products from overseas as inspiration when redeveloping products for the domestic market. Sustainable redevelopment refers to designers and makers ensuring products serve social, economic and environmental needs. Generating economic growth for design and manufacturing in Australia can begin with redeveloping existing products so they have positive social and minimal environmental impact. In this unit students examine claims of sustainable practices by designers.

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.

**Outcomes** - On completion of this unit the student should be able to design and plan the redevelopment of a product with the intention of developing a different product with consideration of sustainability issues. Students should be able to select and apply materials, tools, equipment and processes to make a redeveloped product, and compare this with the original product.

## **PRODUCT DESIGN & TECHNOLOGY 2 – COLLABORATIVE DESIGN**

---

**Unit Statement** - 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. Teamwork encourages communication between students and mirrors professional design practice where designers often work within a multi-disciplinary team to develop solutions to design problems. Students also use digital technologies to facilitate teams to work collaboratively online.

In this unit students gain inspiration from an historical or a contemporary design movement or style and its defining factors such as ideological or technological change, philosophy or aesthetics.

**Outcomes** - On completion of this unit the student should be able to design and plan a product or range of products collaboratively in response to a design brief. Students should be able to justify, manage and use appropriate production processes to make a product safely and evaluate individually and as a member of a team, the processes and materials used and the suitability of a product or components of a group product/s against the design brief.

## **PRODUCT DESIGN & TECHNOLOGY 3 – APPLYING THE PRODUCT DESIGN PROCESS**

---

**Unit Statement** - In this unit 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.

Design and product development and manufacture occur in a range of settings. An industrial setting provides a marked contrast to that of a one-off situation in a small cottage industry or a school setting. Although a product design process may vary in complexity or order, it is central to all of these situations regardless of the scale or context. This unit examines different settings and takes students through the product design process as they design for an end-user/s. Students identify methods which could be used in a low-volume or mass/high-volume production setting to manufacture a similar product to their design.

In the initial stage of the product design process a design brief is prepared, outlining the context or situation around the design problem and describing the needs and requirements in the form of constraints or considerations.

**Outcomes** - On completion of this unit the student should be able to investigate and define a design problem, and discuss how the design process leads to product design development. Students should be able to explain and analyse influences on the design, development and manufacture of products within industrial settings. Students should also be able to document the product design process used to meet the needs of an end-user/s, and commence production of the designed product.

## **PRODUCTION DESIGN & TECHNOLOGY 4 – PRODUCT DEVELOPMENT AND EVALUATION**

---

**Unit Statement** - In this unit 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.

**Outcomes** - On completion of this unit the student should be able to compare, analyse and evaluate similar commercial products, taking into account a range of factors and using appropriate techniques. Students should be able to apply a range of production skills and processes safely to make the product designed in Unit 3, and manage time and resources effectively and efficiently. On completion of this unit the student should be able to evaluate the finished product through testing and feedback against criteria, create end-user/s' instructions or care labels and recommend improvements to future products.

## **VCE VET AUTOMOTIVE**

---

**VIC Certificate II in Automotive Studies (pre-vocational):** a state accredited curriculum which offers students the opportunity to develop their skills and knowledge across a range of automotive sectors including automotive mechanical and electrical, vehicle body panel beating, spray painting, trimming and making; and vehicle engine reconditioning.

## VCE VET BUILDING & CONSTRUCTION

---

**Certificate II in Building and Construction (Bricklaying, Carpentry, Painting and Decorating, Wall and Ceiling Lining, Wall and Floor Tiling, Solid Plastering and Stonemasonry) Pre-apprenticeship:** state accredited curriculum which provides students with the knowledge and skills to enhance their employment prospects in the building and construction industry. The program offers full completion of the pre-apprenticeship and includes units such as safe handling and use of plant and power tools, quality principles for the construction industry, calculations and workplace documents and plans. Stream-specific units focus on providing foundation skills necessary for the chosen sectors in industry areas: carpentry, bricklaying, painting and decorating, wall and ceiling lining, wall and floor tiling, solid plastering and stonemasonry.

### PSYCHOLOGY 1- HOW ARE BEHAVIOUR AND MENTAL PROCESSES SHAPED?

---

**Unit Statement** - Human development involves changes in thoughts, feelings and behaviours. In this unit students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system. Students explore brain plasticity and the influence that brain damage may have on a person's psychological functioning. They consider the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary studies have made to an understanding of the human brain and its functions, and to the development of different psychological models and theories used to predict and explain the development of thoughts, feelings and behaviours. A student-directed research investigation related to brain function and/or development is undertaken in this unit.

**Outcomes** - On completion of this unit the student should be able to describe how understanding of brain structure and function has changed over time, explain how different areas of the brain coordinate different functions, and explain how brain plasticity and brain damage can change psychological functioning. They should also be able to identify the varying influences of nature and nurture on a person's psychological development, and explain different factors that may lead to typical or atypical psychological development. Students should be able to investigate and communicate a substantiated response to a question related to brain function and/or development, including reference to at least two contemporary psychological studies and/or research techniques.

### PSYCHOLOGY 2- HOW DO EXTERNAL FACTORS INFLUENCE BEHAVIOUR AND MENTAL PROCESSES?

---

**Unit Statement** - A person's thoughts, feelings and behaviours are influenced by a variety of biological, psychological and social factors. In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of an individual and groups. They examine the contribution that classical and contemporary research has made to the understanding of human perception and why individuals and groups behave in specific ways. A student practical investigation related to internal and external influences on behaviour is undertaken in this unit.

**Outcomes** - On completion of this unit the student should be able to compare the sensations and perceptions of vision and taste, and analyse factors that may lead to the occurrence of perceptual distortions, they should be able to identify factors that influence individuals to behave in specific ways, and analyse ways in which others can influence individuals to behave differently. Students should also be able to design and undertake a practical investigation related to external influences on behaviour, and draw conclusions based on evidence from collected data.

### PSYCHOLOGY 3 HOW DOES EXPERIENCE AFFECT BEHAVIOUR AND MENTAL PROCESSES?

---

**Unit Statement** - The nervous system influences behaviour and the way people experience the world. In this unit students examine both macro-level and micro-level functioning of the nervous system to explain how the human nervous system enables a person to interact with the world around them. They explore how stress may affect a person's psychological functioning and consider the causes and management of stress. Students investigate how mechanisms of memory and learning lead to the acquisition of knowledge, the development of new capacities and changed behaviours. They consider the limitations and fallibility of memory and how memory can be improved. Students examine the contribution that classical and contemporary research has made to the understanding of the structure and function of the nervous system, and to the understanding of biological, psychological and social factors that influence learning and memory.

**Outcomes** - On completion of this unit the student should be able to explain how the structure and function of the human nervous system enables a person to interact with the external world and analyse the different ways in which stress can affect nervous system functioning. Students should be able to apply biological and psychological explanations for how new information can be learnt and stored in memory, and provide biological, psychological and social explanations of a person's inability to remember information.

## PSYCHOLOGY 4 HOW IS WELLBEING DEVELOPED AND MAINTAINED?

---

**Unit Statement** - Consciousness and mental health are two of many psychological constructs that can be explored by studying the relationship between the mind, brain and behaviour. In this unit students examine the nature of consciousness and how changes in levels of consciousness can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person's functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach, as a scientific model, to analyse mental health and disorder. They use specific phobia to illustrate how the development and management of a mental disorder can be considered as an interaction between biological, psychological and social factors. Students examine the contribution that classical and contemporary research has made to the understanding of consciousness, including sleep, and the development of an individual's mental functioning and wellbeing.

**Outcomes** - On completion of this unit the student should be able to explain consciousness as a continuum, compare theories about the purpose and nature of sleep, and elaborate on the effects of sleep disruption on a person's functioning. Students should be able to explain the concepts of mental health and mental illness including influences of risk and protective factors, apply a biopsychosocial approach to explain the development and management of specific phobia, and explain the psychological basis of strategies that contribute to mental wellbeing. Students should also be able to design and undertake a practical investigation related to mental processes and psychological functioning, and present methodologies, findings and conclusions in a scientific poster.

## STUDIO ARTS 1 – STUDIO INSPIRATION AND TECHNIQUES

**Unit Statement** - In this unit students focus on developing an individual understanding of the stages of studio practice and learn how to explore, develop, refine, resolve and present artworks. Students explore sources of inspiration, research artistic influences, develop individual ideas and explore a range of materials and techniques related to specific art forms. Using documented evidence in a visual diary, students progressively refine and resolve their skills to communicate ideas in artworks. Students also research and analyse the ways in which artists from different times and cultures have developed their studio practice to interpret and express ideas, source inspiration and apply materials and techniques in artworks.

The exhibition of artworks is integral to Unit 1 and students are encouraged to visit a variety of exhibition spaces throughout the unit, reflect on the different environments and examine how artworks are presented to an audience.

**Outcomes** - On completion of this unit the student should be able to identify sources of inspiration and artistic influences and outline individual ideas, art forms and aesthetic qualities, and translate these into visual language. Students should be able to produce at least one finished artwork and progressively record the development of their studio practice, conveying individual ideas through the exploration of materials and techniques in the selected art form/s. Students should also be able to discuss the artistic practice of artists from different times and cultures, their sources of inspiration, materials and techniques for at least two artworks by each artist.

## STUDIO ARTS 2 – STUDIO EXPLORATION AND CONCEPTS

---

**Unit Statement** - In this unit students focus on establishing and using a studio practice to produce artworks. The studio practice includes the formulation and use of an individual approach to documenting sources of inspiration, and experimentation with selected materials and techniques relevant to specific art forms. Students explore and develop ideas and subject matter, create aesthetic qualities and record the development of the work in a visual diary as part of the studio process.

Through the study of art movements and styles, students begin to understand the use of other artists' work in the making of new artworks. Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand developments in studio practice. Using a range of art periods, movements or styles, students develop a broader knowledge about the history of art. Analysis is used to understand the artists' ideas and how they have created aesthetic qualities and subject matter. Comparisons of contemporary art with historical art styles and movements should be encouraged.

The exhibition of artworks is integral to Unit 2 and students are encouraged to visit a variety of exhibition spaces throughout the unit, reflect on the different environments and examine how artworks are presented to an audience.

**Outcomes** - On completion of this unit the student should be able to develop an individual exploration proposal to form the basis of a studio process, and from this produce and document a variety of potential directions in a visual diary for at least one artwork. Students should be able to compare a range of historical and contemporary art periods, styles or movements, and analyse the ways in which artists communicate ideas, develop styles and demonstrate aesthetic qualities in artworks.

## STUDIO ARTS 3 – STUDIO PRACTICES AND PROCESSES

---

**Unit Statement** - In this unit students focus on the implementation of an individual studio process leading to the production of a range of potential directions. Students develop and use an exploration proposal to define an area of creative exploration.

They plan and apply a studio process to explore and develop their individual ideas. Analysis of these explorations and the development of the potential directions is an intrinsic part of the studio process to support the making of finished artworks in Unit 4. For this study, the exploration proposal supports the student to identify a direction for their studio process. The student determines the studio process. This process records trialling, experimenting, analysing and evaluating the extent to which art practices successfully communicate ideas presented in the exploration proposal. From this process students progressively develop and identify a range of potential directions. Students will select some of these potential directions from which to develop at least two artworks in Unit 4.

The study of artists and their work practices and processes may provide inspiration for students' own approaches to art making. Students investigate and analyse the response of artists to a wide range of source material and examine their use of materials and techniques. They explore professional art practices of artists from different historical and cultural contexts in relation to particular artworks and art forms.

The exhibition of artworks is integral to Unit 3 and students are expected to visit a variety of exhibitions throughout the unit, reflect on the different environments where artworks are exhibited and examine how artworks are presented to an audience. Students are expected to visit at least two different exhibitions and study specific artworks displayed in these exhibitions during their current year of study.

**Outcomes** - On completion of this unit the student should be able to prepare an exploration proposal that formulates the content and parameters of an individual studio process including a plan of how the proposal will be undertaken. Students should be able to progressively present an individual studio process recorded in written and visual form that produces a range of potential directions, and reflects the concepts and ideas documented in the exploration proposal and work plan. Students should also be able to examine the practice of at least two artists, with reference to two artworks by each artist, referencing the different historical and cultural context of each artwork.

## STUDIO ARTS 4 – STUDIO PRACTICE AND ART INDUSTRY CONTEXTS

---

**Unit Statement** - In this unit students focus on the planning, production and evaluation required to develop, refine and present artworks that link cohesively according to the ideas resolved in Unit 3. To support the creation of artworks, students present visual and written evaluation that explains why they selected a range of potential directions from Unit 3 to produce at least two finished artworks in Unit 4. The development of these artworks should reflect refinement and skillful application of materials and techniques, and the resolution of ideas and aesthetic qualities discussed in the exploration proposal in Unit 3. Once the artworks have been made, students provide an evaluation about the cohesive relationship between the artworks. This unit also investigates aspects of artists' involvement in the art industry, focusing on a least two different exhibitions, that the student has visited in the current year of study with reference to specific artworks in those exhibitions. Students investigate the methods and considerations of the artist and/or curator involved in the preparation, presentation and conservation of artworks displayed in exhibitions in at least two different galleries or exhibitions. Students examine a range of environments for the presentation of artworks including public galleries and museums, commercial and private galleries, university art galleries, artist-run spaces, alternative art spaces and online gallery spaces.

**Outcomes** On completion of this unit the student should be able to present at least two finished artworks based on selected and evaluated potential directions developed through the studio process, which demonstrate refinement and application of materials and techniques, and that realise and communicate the student's ideas expressed in the exploration proposal. Students should be able to provide visual and written documentation that identifies and evaluates the extent to which the artworks reflect the selected potential directions, and effectively demonstrates a cohesive relationship between the works. Students should also be able to compare the methods used by artists and considerations of curators in the preparation, presentation, conservation and promotion of specific artworks in at least two different exhibitions.

## **VISUAL COMMUNICATION AND DESIGN 1 – INTRODUCTION TO VISUAL COMMUNICATION DESIGN**

---

**Unit Statement** - This unit focuses on working across the three design fields, Industrial (Product based design), Environmental (Architecture based design) and Communication (graphic design based). This involves learning and applying design thinking skills, and visualisation and technical drawing skills to create messages, ideas and concepts. Students practise their ability to draw what they observe and they use visualisation drawing methods to explore their own ideas and concepts. Students develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications. Using design elements and design principles, students develop an understanding of how they affect design and visual message and the way information and ideas are read and perceived. Students review the contextual background of visual communication through an investigation of design styles. This research introduces students to the broader context of the place and purpose of design. Students are introduced to the importance of copyright and intellectual property and the conventions for acknowledging sources of inspiration. In this unit students are introduced to four stages of the design process: research, generation of ideas, development of concepts and refinement of visual communications.

**Outcomes** - On completion of this unit the student should be able to create drawings for different purposes using a range of drawing methods, media and materials. On completion of this unit the student should be able to select and apply design elements and design principles to create visual communications that satisfy stated purposes. On completion of this unit the student should be able to describe how visual communications in a design field have been influenced by past and contemporary practices, and by social and cultural factors.

## **VISUAL COMMUNICATION AND DESIGN 2 – APPLICATIONS OF VISUAL COMMUNICATION WITHIN DESIGN FIELDS**

---

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

**Outcomes** - On completion of this unit the student should be able to create presentation drawings that incorporate relevant technical drawing conventions and effectively communicate information and ideas for a selected design field. On completion of this unit the student should be able to manipulate type and images to create visual communications suitable for print and screen-based presentations, taking into account copyright. On completion of this unit the student should be able to apply stages of the design process to create a visual communication appropriate to a given brief.

## VISUAL COMMUNICATION AND DESIGN 3 – VISUAL COMMUNICATION DESIGN PRACTICES

---

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

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

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

**Outcomes** - On completion of this unit the student should be able to create visual communications for specific contexts, purposes and audiences that are informed by their analysis of existing visual communications in the three design fields. On completion of this unit the student should be able to discuss the practices of a contemporary designer from each of the design fields and explain factors that influence these practices. On completion of this unit the student should be able to apply design thinking in preparing a brief with two communication needs for a client, undertaking research and generating a range of ideas relevant to the brief.

## VISUAL COMMUNICATION AND DESIGN 4 – VISUAL COMMUNICATION DESIGN DEVELOPMENT, EVALUATION AND PRESENTATION

---

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

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

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

**Outcomes** - On completion of this unit the student should be able to develop distinctly different concepts for each communication need and devise a pitch to present concepts to an audience, evaluating the extent to which these concepts meet the requirements of the brief. On completion of this unit the student should be able to produce a final visual communication presentation for each communication need that satisfies the requirements of the brief.

## VCAL SENIOR PROGRAM

This program develops skills and knowledge while building independent learning, through a reasonable degree of self-directed planning of learning activities.

- All students will select the combined Personal Development Skills and Work Related Skills subject (compulsory for a VCAL cert).
- Students may choose to select VCAL Literacy or select a VCE English subject.
- Students may choose to select a VCAL Numeracy or select a VCE Mathematics subject.
- In addition students will need to select a VET course and some VCE subjects.

VCAL outcomes are met through students demonstrating competency with the learning outcomes of each unit. Assessment of competency is made by students building up a portfolio of evidence for each unit. These will include samples of work completed and the use of digital images. The VCAL Senior Program builds on the progress made at the intermediate level.

Students must undertake a minimum of 10 credits. Each subject equals one credit.

A typical Intermediate VCAL Program.

SEMESTER	LITERACY & NUMERACY SKILLS	INDUSTRY SPECIFIC SKILLS	WORK RELATED SKILLS	PERSONAL DEVELOPMENT SKILLS
1	VCE English Unit 1 <b>Or</b> VCAL Literacy Unit 1 and VCAL Numeracy Skills Intermediate	VET Certificate II/III e.g. VET Hospitality and One day per week work placement.	VCE Food & Technology Unit 1 <b>Or</b> VCE Design & Technology Unit 1 <b>Or</b> VCE Outdoor Education and Environmental Studies Unit 1	Personal Development Intermediate Unit 1
2	VCE English Unit 2 <b>Or</b> VCAL Literacy Unit 2 and VCAL Numeracy Skills Intermediate	VET Certificate II/III e.g. VET Hospitality and One day per week work placement	VCE Food & Technology Unit 2 <b>Or</b> VCE Design & Technology Unit 2 <b>Or</b> VCE Outdoor Education and Environmental Studies Unit 2	Personal Development Intermediate Unit 2

## VCAL LITERACY

The purpose of this unit is to enable learners to develop the skills and knowledge to read and write a range of texts on everyday subject matters which include some unfamiliar aspects or material. At this level learners, once they have identified the audience and purpose of the text, use the writing process to produce texts that link several ideas or pieces of information. In reading, learners identify how, and if, the writer has achieved his or her purpose and express an opinion on the text taking into account its effectiveness. Studies are undertaken at Intermediate level (Year11) or Senior level (Year 12).

### Outcomes:

Writing for Self Expression – Focuses on writing a recount, narrative or expressive text using stages of the writing process.

Writing for Practical Purposes – Write an instructional / transactional text identifying an audience & purpose.

Writing for Knowledge – Write a report or explanatory texts e.g. write a report on an upcoming event.

Writing for Public Debate – Write an argumentative or discursive text.

Reading for Self Expression – Demonstrate that meaning has been gained from reading a narrative, recount or expressive text.

Reading for Practical Purposes – Demonstrate that meaning has been gained from reading an instructional or transactional text.

Reading for Knowledge – Demonstrate that meaning has been gained from reading an explanatory or informative text.

Reading for Public Debate – Demonstrate that meaning has been gained from reading a persuasive or argumentative text.

Oracy for Knowledge – Use and respond to spoken language in informative talks

Oracy for Practical Purposes – Use and respond to spoken language in instructions and transactions

Oracy for Exploring Issues & Problem Solving – Use and respond to spoken language in discussions to explore issues or solve problems.

**General Skills:** reading, writing and oral communication skills.

## VCAL NUMERACY

---

VCAL Numeracy can be studied at Intermediate level (Year11) or Senior level (Year12). The course allows students to apply learnt skills to everyday problems. Students will complete assignment work that is 'hands-on' and often related to tasks being completed in the Personal Development units. Underpinning the VCAL Numeracy Skills Unit is the concept that skills development occurs best when it takes place within social contexts and for social purpose.

**Outcomes:** Numeracy for Personal Organisation – Location, money and time.  
Numeracy for Interpreting Society – Numerical Information and Data  
Numeracy for Practical Purposes - Design and Measuring  
Numeracy for Knowledge – Formulae, graphs, algebraic techniques, problem solving.

**General Skills:** problem solving; applying ideas to everyday situations, communication.

## INTERMEDIATE PERSONAL DEVELOPMENT SKILLS AND WORK RELATED SKILLS

---

Students will have opportunities to develop their readiness for independent learning; for the development of employability skills for specific vocational fields of interest. This will be achieved through a number of activities, projects and learning opportunities that are decided by the group with their teacher. Students will update Safe@Work modules and other Occupational Health and Safety training in readiness for work placements. Reflection on work place experiences becomes part of the learning experience. Personal Development is a compulsory Unit that focuses on the development of organisation and planning skills, knowledge, practical skills, problem solving and interpersonal skills through participation in experiences of a practical nature.

To meet the Work Related Skills strand students must choose from one of the following;

- Outdoor and Environmental Studies
- VCE Food and Technology
- VCE Product Design and Technology
- VCE IT Applications or Software Development
- VCE Systems Engineering

**Outcomes:** Plan and organise a complex activity; Demonstrate self-management skills for goal achievement; Demonstrate knowledge, skills and abilities in the context of an activity or project; Describe leadership skills and responsibilities; Utilise interpersonal skills to communicate ideas and information; Identify planning and organisation skills relevant for management of health or community service goals/activities; Demonstrate skills relevant to complex problem solving and comprehension; Demonstrate knowledge and skills related to a hobby, study or interest;

Demonstrate knowledge and skills to present information to an audience; Use spoken English and active listening skills to communicate complex ideas and information;

**Key Tasks :** group and task discussions; group project work; volunteering for community goals; team building exercises; sport and recreation activities; resume development; industry visits.

**General Skills:** team work; planning and organisation; problem solving; communication.

## SENIOR PERSONAL DEVELOPMENT SKILLS

---

The purpose of this unit is to focus on the development of organisation and planning skills, knowledge, practical skills, problem solving and interpersonal skills through participation in experiences of a practical nature. As part of the VCAL program students participate in complex projects and activities in their community and school that help develop teamwork skills and self-confidence. Students are required to show a high degree of independent learning.

**Outcomes** Plan and organise to completion a complex project involving a range of related activities; Apply an awareness of cultural activities within a complex project; Apply strategies to improve organisational communication; Demonstrate leadership skills for group and teamwork; Use decision-making skills in a group or team context; Develop personal goals involving strategies, timelines of personal interest; Apply evaluative and problem-solving skills to planning; Demonstrate knowledge of facts & concepts specific to technical activity; Manage the coordination of an activity or program; Present and communicate ideas and information.

## INDUSTRY SPECIFIC SKILLS

---

The purpose of this unit is to enable the development of skills, knowledge and attitudes related to vocational areas that lead to further learning or employment. A VCAL learning program must include industry specific units from Vocational Education and Training (VET) programs or VCE VET (a 2 year program).

# VCE GLOSSARY OF TERMS

## **Coursework Assessment**

Tasks completed, mainly in class time, to establish performance in Unit 1 & 2. It must conform to the study design.

## **ATAR**

Australian Tertiary Admission Rank. It is the overall ranking on a scale of 0-99.5 that you receive, based on your study scores (see below). The ATAR is used by Universities and TAFE institutes to select students for their courses.

## **GAT**

General Achievement Test. A test that is done by all students doing a Unit 3 & 4 sequence. It is used by the VCAA to check that schools are marking school-assessed tasks to the same standard. It doesn't count towards your VCE graduation, but your GAT results are reported to you with your Statement of Results.

## **Learning outcomes**

What you must know, or be able to do, by the time you have finished a unit.

## **SAC = School Assessed Coursework**

Assessment of work, mainly in class time, to establish performance in Units 3 & 4. The assessment must conform to the Study Design and is marked by Unit 3 & 4 teachers according to VCAA criteria.

## **Satisfactory completion**

In plain language, this means you have passed a unit. You get an 'S' for the unit. If you do not satisfactorily complete a unit, you get an 'N' for it.

## **ASBA**

Australian School Based Apprenticeship Program. Nationally recognised vocational studies now integrated within the VCE.

**Sequence** The order in which you do your units, for example, a Unit 3 and 4 sequence.

## **Statement of Results**

A set of documents that formally state the results you achieved in the VCE, and whether you have graduated.

## **Structured Workplace Learning**

The placement of a student into an industrial setting for on-the-job learning and assessment. It is an essential element of VET, VCAL and ASBA programs. The student is assessed, by a workplace assessor, as either '**competent**' or '**not yet competent**' in the performance of their tasks judged against nationally accredited vocational criteria.

## **Study Design**

The description of the content of a study, and how student's work is to be assessed. A Study Design for each VCE study is published by the VCAA. Schools and other VCE providers must adhere to the study designs.

## **Study Score**

(Relative Position) A score from 0 - 50 which shows how you performed in a study, relative to all other students doing that same study. It is based on your results in school assessments and examinations.

**Units** The parts of a study. There are usually four units in a study, numbered 1, 2, 3, and 4.

## **Victorian Curriculum and Assessment Authority [VCAA]**

A Victorian State Government authority responsible to the Minister of Education for delivery and assessment of the VCE.

**VCAL** Victorian Certificate of Applied Learning.

**VET** Vocational Education and Training. A range of nationally recognised vocational studies within the VCE



# Echuca College

DIVERSITY OF  
STRENGTH

**Phone:** 03 5482 1133

**E:** [echuca.co@edumail.vic.gov.au](mailto:echuca.co@edumail.vic.gov.au)

**W:** [www.echucacollege.vic.edu.au](http://www.echucacollege.vic.edu.au)

**Facebook:**

[facebook.com/echucacollege](https://facebook.com/echucacollege)

