Senior School
Curriculum Handbook 2016
INTRODUCTION

At Yarra Hills Secondary College, we go to great lengths to ensure that we offer an engaging and supportive learning environment that provides opportunity and encouragement for each of our students. This allows us to be able to develop the students’ individual strengths and talents. Our College Values, Respect, Endeavour, Achievement and Pride provide the basis for all interactions within and across our school community. We are proud of the achievements of our students, and all college staff members are committed to ensuring our students develop life-long learning skills, curiosity, resilience and determination.

Junior School Years 7 and 8 – Strong Foundations

Our Year 7 and 8 programs build strong foundations for future successes. We provide a solid foundation by emphasising Literacy, Numeracy and the use of Information and Communication Technologies (ICT) across all subjects in the curriculum. Our junior students also utilise iPads within and across the curriculum. Junior School students enjoy access to all key learning areas, including PE/Sport and are provided with enrichment, extension and/or support programs. Good study habits, regular homework and pride in achievement are encouraged, expected and rewarded.

Middle School Years 9 and 10 – Growth and Preparedness

Middle School is marked by broadening choices and increased self-reliance as students grow toward maturity and independence. A solid core curriculum is supported by a stimulating elective program that recognises the different needs of students and promotes individual learning and career pathways. Academic learning is enhanced by access to structured work experience and vocational opportunities including traineeships. Year 10 students enjoy access to extension into VCE subjects, which can also assist in maximising their tertiary entrance score. Students make use of a wide variety of ICT resources in these year levels, with those in Year 9 continuing to use iPads and iPad based apps, while Year 10 students gain access to the college Bring Your Own Device (BYOD) Program and its associated resources.

Senior School Years 11 and 12 – VCE, VET or VCAL

Our senior students experience a young adult learning environment. Academic rigour, initiative and self-discipline are central to life at the senior levels with a cooperative team culture supporting each student’s quest for success. We offer a comprehensive selection of studies for those students choosing to undertake VCE. Our VCE students consistently gain placement in their top preferred tertiary venues. We are also able to prepare students for entry into the vocation of their choice through additional programs including Vocational Education and Training (VET), and the Victorian Certificate of Applied Learning (VCAL) school-based apprenticeships and traineeships. Our ability to offer these alternatives ensures that we can find an appropriate pathway for each individual student.

New Facilities and Facilities Upgrades

The College has recently completed the development of state of the art facilities at its Mooroolbark site. At this campus, students have access to two separate educational precincts, a year 7-10 Junior precinct and a year 11/12 Senior precinct. These precincts share a centrally situated gymnasium, sporting field, performing arts centre, foods technology facility, library and administration block. The other year 7-10 precinct, at the Mt Evelyn Campus, is also now in the process of upgrading facilities, in line with those at Mooroolbark.

I encourage students and parents to review this handbook carefully and discuss thoroughly the options and opportunities it presents. The handbook is just part of the support offered to students in developing their pathways through secondary school. Key personnel in the College who can also assist are the Campus Principals and Assistant Principals, Heads of School, Year Level Coordinators, Careers & Pathways Leader and individual teachers who are all committed to the development of every student into well-educated, responsible and resilient young adults.

Darren Trippett
College Principal
Senior School Programs

General Information
Located at the foot of Mt Dandenong and five minutes’ walk from Mooroolbark Station, the Mooroolbark Campus of Yarra Hills was established specifically to meet the educational and pathway needs of young adults in the Outer Eastern area. The campus environment is relaxed and friendly with a large population of like-minded young adults working cooperatively with a team of dedicated and highly experienced staff to achieve their goals. Since 2014, the Mooroolbark Campus has operated as a 7-12 school with both Junior and Senior precincts. The curriculum structure of the Senior School is designed to meet a variety of needs and offers the traditional academic emphasis leading to Tertiary placement, as well as a more vocational, work orientated focus leading to direct employment or a combination of work and further training or industry based certification. The VCE suits the majority of students, while VET Programs are for the more vocationally oriented, and VCAL may be completed through either our traineeship or Pathway program. These options are explained in detail in the following pages in the following order:

- VCE
- VET
- VCAL

Information is also included on:

- VCE Ready
- Conditions of Enrolment
- VCE Unit Descriptions

Victorian Certificate of Education (VCE)

Entry to VCE
General entry students will be required to have satisfactorily completed a Year 10 course of study; special entry students will be considered on an individual basis.

VCE Programs
A VCE program is the complete set of VCE units undertaken by a student over two or more years. Units 1 and 2 refer to units aimed at the Year 11 level and Units 3 and 4 at the Year 12 level. Units 1 and 2 can be completed as independent semester length units, but Units 3 and 4 must still be taken as a sequence over a full year.

The usual model for students is:
Year 11 study six units each semester (may include a VET or Unit 3/4 subject)
Year 12 study a further five units each semester at the Unit 3/4 level.

Satisfactory completion of the VCE
Students are required to have satisfactorily completed sixteen semester length units of study. These sixteen units must include:

- Three units from the English Group (English Units 1 to 4; EAL (English as an Additional Language) and Literature Units 3 and 4 only). One of the unit 3/4 sequences from the English Group will be counted in the ATAR, but no more than two can be allowed in the primary four.
- Three sequences of Units 3 and 4 in studies other than English, i.e. 3 ‘other’ Year 12 subjects.

Unit outcomes
Each VCE Unit includes between two and four outcomes. Outcomes must all be achieved for satisfactory completion of the Unit. Achievement of the outcomes is based on the teacher’s assessment of the student’s achievement of the required level of key knowledge and key skills for those outcomes. The school, in accordance with the VCAA requirements, determines satisfactory completion of units.

Assessment of VCE Units 1 and 2
All studies have both school assessment and school examinations. School assessment is made up of assessment tasks used to assess learning outcomes and are completed mainly in class under test conditions. Assessment tasks are reported to the student as a score out of total for the task, i.e. 45 out of 50.
All Units 1 and 2 studies have exams in June and November. Exams are compulsory and are separately reported on end of semester reports.

**Assessment of VCE Units 3 and 4**

A study score in the range from 0 to 50 is awarded where a student has achieved a ‘satisfactory’ result for both Units 3 and 4 in the study. This score is based upon both school assessment and examination(s). Results of all assessment tasks are converted from a numerical score and reported by the VCAA as grades ranging from A+ to E or NA (Not Assessed – where the task was not attempted).

**School assessment**

**School-assessed coursework (SACs)**

School assessed coursework is made up of a number of assessment tasks that are specified by the Victorian Curriculum Assessment Authority (VCAA). Assessment tasks are used to assess the unit learning outcomes.

- The assessment tasks are part of the regular teaching and learning program.
- They are completed mainly in class time.
- They are completed mainly in a limited timeframe.

**School-assessed tasks (SATs)**

A small number of studies will have school-assessed tasks (SATs). These occur in studies where products and models are assessed. Media, Studio Arts, Visual Communication and Design, Systems Engineering and Food and Technology have school-assessed tasks that measure performance in production of a physical product.

**Examinations**

Examinations are set and assessed by the VCAA. Since 2013 all external examinations have been held in the October / November period. Music, Dance and Drama have an additional performance examinations and LOTE an oral examination.

**General Achievement Test (GAT)**

The GAT is compulsory for every student enrolled in Unit 3 and 4 sequences, whether in Year 11 or 12. It does not, however, contribute to the final VCE result but the VCAA uses the GAT as one of the checks to ensure an examination paper is marked accurately. If a result is two grades lower than the grade predicted by the GAT, then the paper is automatically assigned to a second marker for checking. The GAT is also used in situations where a derived grade is required due to a medical condition. Students will receive a report on their GAT results at the end of the year telling them their performance in the areas of Literacy, Mathematics and the Arts relative to the other students sitting the GAT. Tertiary institutions are increasingly using the GAT scores to distinguish between students in the ‘middle selection band’.

**Special provision**

Students experiencing personal difficulty completing their VCE studies may apply for Special Provision in the following categories:

- Assistance in choosing or changing a VCE program.
- Special arrangements for completion of sets of outcomes, school assessed coursework or examinations and the GAT.
- A derived score can be awarded by the VCAA in cases where SACs or exams are missed or are severely affected by illness or personal trauma.

Students are required to provide documentary evidence such as medical certificates or reports from health care professionals. The Principal determines whether the application meets the criteria set by the VCAA.

**Reporting results**

The school issues written reports at the end of Units 1, 2 and 3. The reports provide information on student progress and achievement and state the results awarded for assessment tasks.

Students undertaking Units 1 and 2 receive a Statement of Results from the VCAA showing ‘S’ or ‘N’ for units. The school distributes this at the end of the year.

Students undertaking Units 3 and 4 receive a Statement of Results from the VCAA showing ‘S’ or ‘N’ for units. It will also show the grades awarded for school assessed coursework and examinations and a Study Score (relative position) for each unit 3 and 4 sequence. In addition, this Statement of Results states whether VCE requirements have been met.
The Statement of Results is mailed directly to students in December; however the VCE Certificate issued by the VCAA for graduating students must be collected from the school in December.

Australian Tertiary Admissions Rank (ATAR)
The ATAR is calculated by the Victorian Tertiary Admissions Centre (VTAC) and is derived by formula calculation from a student’s scaled study scores for Units 3 and 4 studies. Its objective is to rank students for tertiary selection.

The ATAR is only calculated if a student has satisfactorily completed the VCE, including both Units 3 and 4 from the English Group. Further details about the ATAR are given in the Tertiary Selection and the ATAR booklet available from the school. Students apply for tertiary courses using the VTAC Infoline or Infonet at www.vtac.edu.au. VTAC guides and briefing sessions are provided in Term 3.

Options within the VCE

Accelerated programs

Studying a Unit 3/4 sequence during Year 11 is desirable for students who have demonstrated a capacity to work at the higher level. The experience of sitting the exams and GAT is invaluable and adds a sixth subject from which an ATAR score is calculated. For advice on entry into the Acceleration Program students should seek a teacher recommendation and possibly an interview to assess suitability.

Year 11 students undertaking an accelerated program must select a full twelve unit program in their first year of VCE. Selected students should recognise that the Acceleration Program carries an additional workload to the standard year 11 program, and that once commenced, students will be expected to complete the full program.

Caution:

Difficulties in coping with the Unit 3/4 study will not be considered a suitable reason for modifying the student’s Year 11 program. It is expected that students in this program will complete another five subjects the next year. Reduction in an acceleration program will only be considered if it is supported by medical/welfare evidence to protect the student’s health or welfare. Studying only four subjects in Year 12 negates the benefits of the accelerated program for a higher ATAR score.

VCE Transition

This program is suitable for students who would have difficulty completing the VCE in two years and are not ready for a full Year 11 program. Students have the option to complete VCE over 3 years. Entry is only by recommendation from school counsellors or via parental request in consultation with counsellors.

Every attempt is made to tailor the above program to meet individual student needs. Students must consult with career advisers and/or coordinators who will help them plan an appropriate VCE program. Further information is available from the Pathways Leader at Mooroolbark Campus. Transition students can gain a Foundation VCAL certificate after one year of study by modifying their course slightly. See Page 7 for details. Students would need to complete the VCAL units in Literacy, Numeracy, Personal Development and Work Related Skills and increase work experience hours to achieve this outcome.
VCE Studies offered by Yarra Hills Secondary College

The Arts
Dance, Drama, Media, Music Performance, Studio Arts, Visual Communication Design

Commerce
Business Management, Legal Studies

English
English, EAL, English Literature, Foundation English (modified programs only).

Health and Physical Education
Health & Human Development, Outdoor and Environmental Education, Physical Education

Humanities
History (Twentieth Century) 1-2, History (Revolutions) 3-4

Information Technology
Information Technology 1-2, IT Applications 3-4, Software Development 3-4

LOTE
Range of languages via the Victorian School of Languages (VSL)

Mathematics
Foundation Mathematics, General Mathematics 1-2, Mathematical Methods (CAS), Further Mathematics 3-4, Specialist mathematics 3-4

Science
Biology, Chemistry, Physics, Psychology

Technology
Food & Technology, Systems Engineering (Mechanical/Electrical), Product Design & Technology

NOTE:
(i) All students must pass at least 3 units from the English Group to gain a VCE
(ii) Unless indicated Units 1-4 are offered
(iii) The units timetabled will depend on student demand and staff availability.

Choosing a VCE Program

The normal workload is 22 units over two years. Modified programs may be negotiated under special circumstances. It is not uncommon for a student to undertake a combination of Units 1/2 and 3/4 can be undertaken in the one year as part of an accelerated or extended VCE. There is no Victorian Curriculum Assessment Authority (VCAA) penalty for taking more than one year to accumulate Unit 3/4 studies and a unit may be repeated. However, students can only get credit once for that unit and for a study score to be awarded both Units 3 and 4 must be completed within the one school year.

When choosing your VCE program:
• Carefully read the unit descriptions included in this booklet.
• Consult careers teachers for information on tertiary courses and employment opportunities.
• Consider units that:
  - interest you
  - you do well in
  - lead to preferred employment
  - are prerequisites for further training and tertiary courses
  - are part of the VET in Schools program

Having followed these steps a program selection sheet will be completed in consultation with a pathways counsellor and your selections entered via the school intranet. Whilst every effort will be made to accommodate students’ selected programs, timetabling constraints may affect options for some student programs.
Vocational Education and Training (VET)

VET programs are fully integrated into the VCE. Students are able to include a VET Unit 3/4 sequence as one of three studies other than English needed to gain the VCE. All VET programs with a Unit 3/4 examination component make a direct contribution to the ATAR.

A VET program enables you to widen your horizons and study with a vocational focus. A VET program can be studied in conjunction with either a VCE or a VCAL. On successful completion students will gain two qualifications instead of one, a VCE or VCAL along with a nationally recognised VET Certificate in one of a wide range of industry areas. See below for detailed information.

A VET program combines general and vocational studies and may be delivered through a cluster school. VET programs are an integral part of the VCE and contribute to the 16 units required for satisfactory completion of the Certificate.

The information included in this handbook regarding VET programs is accurate at the time of printing but the courses can vary depending upon student interest.

VET Industry areas offered through Yarra Hills Secondary College:

Automotive (Vehicle Body) Automotive (Mechanical) Business (Office Administration)* Engineering* Hospitality (Operations) Information Technology* Technical Production (Music)* Building and Construction* Aeroskills* Acting/Film & Television * Animal Studies * Furnishing (Furniture Cabinet Making) (Pre Apprenticeship) * Hairdressing * Horticulture * Retail Make Up and Skin care *Offered within the Yarra Valley Cluster Group

VET courses will be delivered through a Yarra Valley VET Cluster school

On successful completion students will receive:

* VCE Certificate and a nationally recognised VET Certificate
* Enhanced training pathways and employment opportunities.

Options after completing a VET program

Further study or work opportunities include:

* Degree courses at university
* Diploma and certificate courses at TAFE institutes and other training organisations
* Further on job training as an Apprentice or Trainee or as an employee.

VET and VCAL

An approved combination of VET (or TAFE), VCAL and possibly VCE units will lead to a VCAL certificate being awarded after one year of study. A VCAL certificate may be a good option for students not suited to the academic rigour of the normal VCE.

Though the cluster group VET courses may change and new courses will be offered by the cluster group. For further information go to the VET cluster groups website which is: www.yvvc.org.au
Sitting alongside the VCE, the Victorian Certificate of Applied Learning [VCAL] is an alternative senior qualification that offers additional pathways for Year 11 and 12 students seeking vocationally orientated career options or employment.

Where does it lead?
The VCAL aims to give students practical work-related experience and a qualification that will be recognised by TAFE institutes and employers. It will help students move from school into work, an apprenticeship or traineeship and/or further training at TAFE. Alternatively, after participating in the VCAL program, students might reconsider their options and transfer to the VCE. Any VCE Units completed as part of a VCAL also count towards a VCE.

Structure
The VCAL has four compulsory areas of study:

- Literacy and Numeracy
- Industry Specific Skills [a VET or TAFE course]
- Work Related Skills [work placement or traineeships, supplemented by the subject ‘Work Related Skills’]
- Personal Development [personal and group projects that will help develop student’s self-confidence and team-work skills]

Credit for prior study
A completed VET or VCE subject can count as part of a VCAL, as can part-time work, voluntary work or community service.

Levels of VCAL
Yarra Hills offers Foundation and Intermediate levels of VCAL. Students will receive a VCAL Certificate and statement of results when they successfully complete the VCAL Program for the level they have chosen.

VCAL at Yarra Hills
VCAL’s flexibility enables students to undertake a study program that suits their interest and learning needs. In 2015 Yarra Hills is offering students the following ways to complete the VCAL:

1. by a Traineeship (see below)
2. by a VCAL Pathway – as a transition program only (see next page)

1. VCAL Traineeships

Traineeships offer a unique program for students who are unlikely to complete Year 12 in a traditional VCE. Students combine their senior school studies with training and employment in industries where they are likely to seek future employment or apprenticeships.

Under this scheme, students spend two days per week at school, one day per week at TAFE (depending on which TAFE the student attends, the TAFE component may take place over one week blocks, or during school holidays) and two days per week in the work place. Students are paid the National Training Wage and are entitled to pro-rata sick leave and annual leave. Students will be responsible for industry training costs which vary from industry to industry, but may be $300-$1000, including class materials. Occupational Health and Safety studies are completed prior to commencing work and protective clothing, if required, will be provided. Note that with changes to State Government funding for TAFE courses that occurred in 2012, the fees for many certificates have increased dramatically.

AtEAST [a consortium of eight secondary schools] working in conjunction with a Group Training Company, will provide work-based opportunities in a range of industries including: Automotive, Electronics, Cabinet Making, Hospitality, Engineering and Horticulture, Hairdressing. Where training is available, and the student can provide the employment, other industry areas can be included in this program.

Students successfully completing one year of the program will gain the VCAL certificate at Foundation level. On completion of the two year program students will have completed a full year of Year 11 studies; gained a nationally recognised traineeship in their chosen industry and gained the VCAL certificate at the Intermediate Level.
Many students take up full-time employment or an apprenticeship at the end of their traineeship. However, it is possible for students to choose to return to school and complete the VCE or undertake another training program. The VCAL is a set program that does not allow for individual program variations.

2. School Based VCAL

Students are able to change from a VCE program and enter a program with a VCAL focus when experiencing difficulties in completing the requirements for VCE.

Please Note: The move to a VCAL focus is NOT automatic. This would occur as part of a review of the students ‘at-risk’ status and would involve negotiation between parents and coordinators.

A school based VCAL can be especially tailored to suit the student’s needs and would involve components of VCAL, VCE and workplace learning to achieve the required 10 credits to complete the VCAL.

### VCE Ready Program

The purpose of this program is to develop effective personal and interpersonal skills that will facilitate the students’ active and successful participation at school, home, work and other social environments.

A number of units have been included to meet the specific needs of our students at different stages in their schooling. In Years 11 developing self awareness, broadening horizons and achieving success are the focus.

Other features of the program include:

- An emphasis on developing positive relationships between students, and between students and teachers.
- The development of habits and patterns of behaviour characteristic of effective learners. Such as time management, organizational skills and planning.
- Career awareness, career education and “work readiness”.
- Goal setting.
- Involvement in community activities.
- The development of key interpersonal skills such as getting along with others and reducing and managing conflict.
- The development of common values of respect for self, others and the environment.
- College events and cross campus competitions.

The program will begin at the study skill camp and will continue throughout the year in classes run alternatively on a Thursday and Friday. The sessions are compulsory.

### Conditions of Enrolment

**Attendance at School**

All students are required to attend Home group meetings each school day regardless of their personal timetable commitments. All students are to remain on the Campus until the end of the school day, with the exception of VET students who must attend VET classes off campus. The school’s attendance policy requires students to attend 100% of their classes unless excused by medical or other school approved reasons.

**Lateness to School**

Notes must be provided for all late arrivals. School detentions are given for unapproved lateness. **Lateness to class** is disruptive, shows poor organisation and a lack of respect for other class members. Consequences for unapproved lateness to class include after school detentions to make up the lost time.

**Early Leaving**

Students who need to leave the campus before the end of the day must obtain an ‘Early Leaver’ pass from the General Office. It is the responsibility of the student to supply written permission from a parent/guardian or to arrange a phone call from home to the Office before a pass is given. Students over 18 cannot write their own notes and must have contact details for another responsible adult for the school to contact.

**Absence from School and Class**
Students must provide evidence to explain any absence. Students over 18 cannot write their own notes. Notes or medical certificates must be given to the Home group Teacher. Students who receive the Youth Allowance should note that ‘Unapproved Absences’ are reported on a regular basis and can result in students being asked to repay money.

The 100% classroom attendance policy is based on VCAA regulations and the only acceptable reason for an absence is a doctor’s certificate, a school generated absence (excursion, incursion or sport) or compelling family circumstances. Where students have completed work but have not met the attendance requirements, a ‘Not Satisfactory’ result for the unit will be recorded.

Voluntary Levies and Cost Intensive Subjects
Students receive a levy sheet detailing requested levies as well as cost-intensive subject levies. Payment of cost-intensive levies is required upon enrolment.

Meeting deadlines
To obtain an “S” for a unit, all sets of outcomes must be satisfactorily completed.

At the beginning of each unit teachers will distribute a list of outcomes and deadlines for submitting the work. Deadlines can only be extended with very good reason. Failure to meet deadlines may result in failing a unit.

Students who miss an Assessment Task, and are able to provide a medical certificate or a valid reason to the Campus Principal, may apply to sit the task. This redemption process is organised through a VCE Coordinator. Without a medical certificate a zero result will be recorded for the Task, however the student will still be required to complete the task in order to demonstrate the outcomes of the unit.

Uniform
The College has a mandatory school uniform. Winter jackets should be plain & navy blue in colour. Hooded tops are not permitted. Shoes must be plain black, polishable with a heel. Uniforms can be purchased from

PSW: 8A/51 Lusher Road, Croydon, Vic, 3136

Facial Piercings & Makeup
Facial piercings are not permitted at Yarra Hills Secondary College. If students already have a facial piercing then they may wear a small invisible style clear plastic piercing to keep the hole open. No more than one existing piercing is permitted. Earlobe stretchers are not permitted. Metal facial piercings must not be worn under any circumstances. No more than two pairs of earrings may be worn in each ear and earrings must be of a 5c piece or smaller. A watch with one small sentimental bracelet may be worn as well as one small sentimental necklace. Excessive jewellery will be removed and may impose a uniform breach. Make-up must also be minimal. Extreme hair styles are not permitted and only natural hair colour is permitted.

Smoking
Smoking is an anti-social activity harmful to personal and social health. Smoking is totally banned within campus buildings and in the vicinity of the campus grounds, including student & staff cars. The consequences for smoking are, in the first instance, an Exclusion (in-school Suspension), then External Suspension for any further offences. Students who infringe the non-smoking policy will be required to undertake a ‘Quit’ program for their own welfare.

Student parking on Campus
Students who successfully obtain their Probationary licence whilst at school and who wish to park their car on campus grounds may do so only when the following conditions are met.
1. An application for Student Parking is approved.
2. The vehicle is registered and roadworthy
3. The student parks the vehicle only in the designated areas
4. The student does not use the vehicle to transport other students to and from the Campus
5. The vehicle is driven with regard to speed limits and the safety of other students, staff and College property.

Mobile Phones and mp3 Players
These items are not to be seen or heard during class. It is student’s responsibility to ensure phones remain on silent or turned off. Consequences apply for students who breach this, which includes confiscation until the end of the day. More serious consequences apply for repeat offenders and parents are contacted. Occasionally mobiles are used within the context of a lesson but this is only done with the permission of the teacher in charge. Electronic devices cannot be taken into any examinations.

A full list of school regulations and processes is provided in the Senior School Policies Document.
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The study of Drama allows students to communicate meaning creatively through exploring ideas and stories that shape their world and develop personal and social identity. VCE Drama focuses on the creation and performance of characters and stories in naturalistic and non-naturalistic ways. Performance and expressive skills are used to explore and develop role and character. A range of stimulus material and play-making techniques will be used to develop and present devised ensemble and solo performance work. Students explore a range of performance styles, conventions, dramatic elements and stagecraft. They develop skills of criticism and aesthetic understanding, through analysis of the development of their own performance work and performances by other professional drama practitioners. Drama requires students to be creative and critical thinkers. The study of drama provides students with knowledge, skills and confidence to communicate as individuals and collaboratively. Drama can provide pathways to training and further studies in fields such as acting, direction, playwriting, production design, production management, communication and drama criticism.

Unit 1: Dramatic storytelling
This unit focuses on storytelling. Creating, presenting and analysing a devised ensemble and solo performance/s, that includes real or imagined characters and is based on stimulus material that reflects personal, cultural and/or community experiences and stories. Naturalistic and non-naturalistic performance styles are used where they will develop awareness and understanding of how characters are portrayed in these styles and document the process they use. They learn about stagecraft, conventions and performance styles from a range of contexts. This unit also involves analysis of a student’s own performance work and of a performance by professional drama practitioners.

Outcomes:
1. Devise and document solo and/or ensemble drama work/s based on experiences and/or stories.
2. Perform a devised drama work/s to an audience.
3. Analyse the development and performance to an audience of their non-naturalistic devised work.
4. Analyse the portrayal of stories and characters in a drama performance by professional or other drama practitioners.

Unit 2: Non-Naturalistic Australian drama
This unit focuses on the use and documentation of the processes involved in creating, presenting and analysing a devised solo or ensemble non-naturalistic performance. The performance work will be based upon and from a contemporary or historical Australian context. Non-naturalistic performance styles from a range of contexts relevant to Australia and Australians will be examined.

Outcomes:
1. Devise and document the processes used to create a solo or ensemble non-naturalistic performance work.
2. Present a performance of a devised non-naturalistic work to an audience.
3. Analyse the creation, development and performance to an audience of their non-naturalistic devised work.
4. Analyse a performance of an Australian drama work.

Unit 3: Devised non-naturalistic ensemble performance
This unit focuses on non-naturalistic devised ensemble drama. Students work collaboratively to devise, develop and present an ensemble performance. Non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions are explored. They will use and manipulate dramatic elements, conventions, performance and expressive skills, performance styles and stagecraft in non-naturalistic ways, to enhance and shape the performance. The stages involved in the creation, development and presentation of the ensemble performance will be documented and evaluated. A professional non-naturalistic performance selected from the prescribed VCE Drama Unit 3 Playlist published by the VCAA, will be viewed and then analysed.

Outcomes:
1. Develop and present character/s within a devised non-naturalistic ensemble performance.
2. Analyse the use of processes, techniques and skills to create and present a devised ensemble performance.
3. Analyse and evaluate a non-naturalistic performance, selected from the VCAA prescribed VCE Unit 3 Playlist.

Unit 4: Non-naturalistic solo performance
This unit focuses on the development and presentation of non-naturalistic devised solo performances. Non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions are explored. Students develop skills in using stimulus material to extract dramatic potential and use
performance styles, conventions and performance and expressive skills to develop and present a short solo performance. A second devised solo performance is developed and created in response to a prescribed structure. The stages involved in the creation, development and presentation of a solo performance are documented and evaluated.

Outcomes:
1. Devise a solo performance in response to given stimulus material and describe the non-naturalistic qualities of the performance.
2. Create, develop and perform a non-naturalistic drama solo in response to a prescribed structure.
3. Analyse and evaluate the creation, development and presentation of a devised non-naturalistic solo performance.

Assessment tasks for both units include:
- Performance – ensemble and solo, written report, responses to structured questions, journal.

Assessment Unit 3 & 4
- Unit 3 school assessed coursework 30%
- Unit 4 school assessed coursework 10%
- Unit 3 and 4 end-of-year written examination 25%
- Unit 4 performance examination 35%
Music Performance

Music Performance develops intellectual, aesthetic and cultural understanding of the value and importance of music in solo and group settings. As soloists and members of groups, students develop skills in preparing programs of music works. They learn about and apply musicianship as they create music and interpret and analyse solo and ensemble works in a range of styles.

There are no prerequisites for entry to Units 1, 2 & 3. However to undertake Units 3 & 4 Solo Performance, students should have about three years experience prior to Year 11 on a musical instrument or in voice. Students may elect to do all six units of study.

Unit 1:
Unit 1 focuses on performance in solo and group contexts, studying performance and performing, and studying approaches to performance and performing, and developing skills in aural comprehension. Students present a solo and group performance, demonstrate prepared technical work and perform previously unseen music.

**Outcomes:**
1. Perform a program(s) of contrasting solo and group works, selected solo technical work that demonstrate unprepared performance skills.
2. Analyse and evaluate influences on works being prepared for performance and approaches that can be used to optimise performance of those works.
3. Describe how instruments are used in combination using selected elements of music, and recognise, sing and write scales, intervals, chords and rhythms, using conventions in music notation.

Unit 2:
Unit 2 further develops skills in practical music and performance in solo and group contexts. Students present a prepared program(s) of solo and group works, demonstrate prepared technical work, perform previously unseen music and develop skills in aural comprehension. Selected works are analysed to enhance performance interpretation and to understand their context, influences, characteristics and styles. This unit also focuses on music theory relevant to performance and used in the analysis of music.

**Outcomes:**
1. Demonstrate developing performance and presentation skills in performing a program(s) of contrasting solo and group works, unprepared performance, and selected technical work.
2. Discuss the contextual issues and describe the characteristics and styles represented in the works, the structure of the works, and expressive features relevant to performance of works selected for performance or other works in a similar style.
3. Recognise, sing and write scales, intervals and chords; transcribe rhythms and melodies; use conventions in music notation and describe how instruments are used in combination.
4. Devise a composition or improvisation that uses music language drawn from analysis of selected works being prepared for performance.

Unit 3: Group Performance
This unit focuses on developing performance skills in an ensemble context. It includes developing skills in either part-writing or improvising and knowledge of the processes involved. Aural comprehension and critical listening skills used by ensemble performers are also developed.

**Outcomes:**
1. Perform works from a range of musical styles with technical accuracy and control, and offer creative interpretations demonstrating stylistic awareness in an ensemble context.
2. Analyse a variety of elements affecting their ensemble performances and selectively implement strategies to develop and present effective performances.
3. Recognise and describe the structure and sound of selected characteristics of music.

Unit 4: Group Performance
This unit focuses on developing performance skills in interpreting styles and applying a range of technical and artistic techniques to present a program of works in an ensemble context. It involves analysis of strategies and techniques for preparing and presenting ensemble performances. This unit further develops aural comprehension and critical listening skills used by ensemble performers to prepare and present performances of music in a range of styles.

**Outcomes:**
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1. Perform a program of works in an ensemble context demonstrating technical accuracy and control, and creative interpretation across a range of styles.

2. Use part-writing techniques to create an arrangement or prepare and present an improvisation, and analyse the techniques and ideas used in creating the arrangement or improvisation.

3. Describe and evaluate the structure and sound of selected characteristics of music.

**Assessment:**

- Unit 3 Group Performance School-assessed coursework: 10%
- Unit 4 Group Performance School-assessed coursework: 15%
- Units 3 & 4 Group Performance aural and written examination: 25%
- Units 3 & 4 Group Performance group performance examination: 50%

**Unit 3 Solo Performance**

This unit focuses on the preparation and presentation of solo works. Students use performance techniques to develop understanding of the interpretation of a range of styles. Ensemble performance, solo, technical work and unprepared performance broaden music performance skills. Aural comprehension skills and understanding of the structure and characteristics of a group work are also developed.

**Outcomes:**

1. Interpret and perform, accurately and artistically, selected solo works in a range of styles and/or characters.
2. Perform a study, technical work and exercises on their main instrument, which will enhance the performance of the selected solo and/or ensemble works, and works that demonstrate unprepared performance skills.
3. Contribute to interpretation in a performance of a prepared ensemble program.
4. Write and describe selected characteristics of music and analyse similarities and differences between interpretations in performance of excerpt from ensemble works.

**Unit 4: Solo Performance**

This unit focuses on the preparation and presentation of a solo program of works demonstrating through performance an understanding of interpretation. Understanding of musical structure and characteristics of a group work are further developed. Ensemble performance, technical work and unprepared performance and studies in aural comprehension extend music performance skills.

**Outcomes:**

1. Interpret and perform accurately and artistically and in ways that project musical intentions, selected solo works in a range of styles and/or characters.
2. Perform technical work on their main instrument, which will enhance the performance of the selected solo and or ensemble works, and works that demonstrate unprepared performance skills.
3. Contribute to interpretation in a performance of a prepared ensemble program.
4. Write and describe selected characteristics of music, and analyse similarities and differences between interpretations in performance of excerpts from ensemble works.

**Assessment:**

- Unit 3 Solo Performance school-assessed coursework: 15%
- Unit 4 Solo Performance school assessed coursework: 10%
- Units 3 & 4 Solo Performance aural and written examination: 25%
- Units 3 & 4 Solo Performance solo performance examination: 50%
Unit 1: Representation and technologies of representation
In this unit students develop an understanding of the relationship between the media, technology and the representations present in media forms. Students also develop practical and analytical skills, including an understanding of the contribution of codes and conventions to the creation of meaning in media products, the role and significance of selection processes in their construction, the role audiences play in constructing meaning from media representations, and the creative and cultural impact of new media technologies.

Outcomes:
1. Describe the construction of specific media representations and explain how the process of representation reproduces the world differently from direct experience of it.
2. Produce and compare media representations in a variety of media forms.
3. Recognise and evaluate the creative and cultural implications of the new media technologies.

Unit 2: Media production and the media industry
Students develop their understanding of the specialist production stages and roles within the collaborative organisation of media production. Students participate in specific stages of a media production, developing practical skills in their designated role. Students also develop an understanding of media industry issues and developments relating to production stages and roles and the broader framework within which Australian media organisations operate.

Outcomes:
1. Explain the media production process and demonstrate specialist production skills in specialist roles within collaborative media production.
2. Identify and analyse industry and production issues concerning the production stages and specialist roles within the media industry.
3. Describe the production characteristics of Australian media organisations and discuss the social and industrial context within which such organisations operate.

Assessment tasks for Unit 1 and 2
- Research Essay
- Digital Photography Assignment
- New Media Oral Presentation
- Group Production Assignment
- Multimedia audio-visual sequences or presentations
- Australian media research essay

Unit 3: Narrative and media production design
The main purpose of this unit is to enable students to develop an understanding of production and story elements and to recognise the role and significance of narrative organisation in fictional media texts. Students also develop practical skills through designing media productions.

Outcomes:
1. Analyse the nature and function of production and story elements in narrative media texts, and discuss the impact of these elements on audience engagement.
2. Use a range of technical equipment, applications and media processes and evaluate the capacity of these to present ideas, achieve effects and explore aesthetic qualities in media forms.
3. Prepare and document a media production design plan in a selected media form for a specified audience.

Unit 4: Media: process, influence and society’s values
The main purpose of this unit is to enable students to further develop practical skills in the production of media products and to realise a production design. Students also develop an awareness of the role of social values in the construction of media texts and analyse issues raised about the role and influence of the media.
Outcomes:
1. Produce a media product for an identified audience from the media production design plan prepared in Unit 3.
2. Discuss and analyse the construction, distribution and interpretation of society’s values as represented in media texts.
3. Analyse and present arguments about the nature and extent of media influence.

Assessment tasks for Unit 3 and 4
- School-assessed coursework for Unit 3: written task in class under exam conditions 6%
- School-assessed task for Unit 3/4: 2 production exercises, design plan and media production 37%
- School-assessed coursework for Unit 4: 2 extended written responses in class under exam conditions 12%
- End-of-year examination: 45%
VCE Studio Arts encourages and supports students to recognise their individual potential as art makers and presents a guided process to assist their understanding and development of art making. The study establishes effective art practices through the application of an individual design process to assist the student’s production of a folio of artworks.

The theoretical component of this study is an important basis for studio practice as it offers students a model for inquiry that can support their art making practices. Students’ research focuses on the visual analysis of artworks and investigates how artists have interpreted sources of inspiration and influences in their art making. Students examine how artists have used materials, techniques and processes to create aesthetic qualities and how artists have developed styles and explored their cultural identity in their artwork.

Unit 1: Artistic Inspiration and Techniques

This unit focuses on using sources of inspiration and individual ideas as the basis for developing artworks and exploring a wide range of materials and techniques as tools for communicating ideas, observations and experiences through art making.

Students also explore and research the ways in which artists from different times and cultures have interpreted and expressed ideas, sourced inspiration and used materials and techniques in the production of artworks.

Outcomes:
1. Students should be able to source inspiration, identify individual ideas and use a variety of methods to translate these into visual language using the design process in their visual diary.
2. In their visual diary, students should be able to explore and use a variety of materials and techniques to support and record the development of individual ideas to produce artworks.
3. Students should be able to discuss how artists from different times and cultures have interpreted sources of inspiration and used materials and techniques in the production of artworks.

Assessment tasks for this unit are:
- a folio including design explorations, research and resources and completed artworks
- short-answer responses in relation to artist’s works
- exhibition reviews
- research paper

Unit 2: Design Exploration and Concepts

This unit focuses on students establishing and using a design process to produce artworks. The design process includes use of an individual approach to locating sources of inspiration, experimentation with materials and techniques, and the development of aesthetic qualities, directions and solutions before the production of artworks.

Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand the artists’ ideas and how they have created aesthetic qualities and identifiable styles.

Outcomes:
1. Students need to be able to develop an individual design process, including visual research and inquiry, in order to produce a variety of design explorations to create a number of artworks.
2. On completion of this unit the student should be able to analyse and discuss the ways in which artists from different times and cultures have created aesthetic qualities in artworks, communicated ideas and developed styles.

Assessment tasks for this unit are:
- a folio including design explorations and finished artworks
- short-answer responses
- research paper

Unit 3: Studio Production and Professional Art Practices

This unit focuses on the use of an individual design process leading to the production of a range of potential directions and solutions. Students develop and use an exploration proposal to define an area of creative exploration. Analysis of these explorations and the development of the potential directions is an intrinsic part of the design process to support the making of finished artworks in Unit 4.
Students investigate and analyse artists and their work practices and their use of materials and techniques. They explore professional art practices of artists in relation to particular artworks and art form/s and identify the development of styles in artworks. Students also consider the issues that may arise from the use of other artists’ work in the making of new artworks.

Students are expected to visit at least two different exhibition spaces in their current year of study.

**Outcomes:**

1. Students prepare an exploration proposal that formulates the content and parameters of an individual design process and that includes a plan of how the proposal will be undertaken.
2. On completion of this unit the student needs to present an individual design process that produces a range of potential directions, which reflects the concepts and ideas documented in the exploration proposal.
3. Students should be able to discuss art practices in relation to particular artworks of at least two artists and analyse ways in which artists develop their styles.

**Assessment tasks for this unit are:**

- a folio, including: an exploration proposal, work plan, design explorations, research and resources.
- short-answer responses in relation to artist’s works
- exhibition reviews
- research paper

**Unit 4: Studio Production and Art Industry Contexts**

This unit focuses on the production of a cohesive folio of finished artworks. Students present visual and written documentation that explains how selected potential directions generated in Unit 3 were used to produce the cohesive folio of finished artworks. These artworks should reflect the skilful application of materials and techniques, and the resolution of ideas and aesthetic qualities.

Students also examine aspects of artists’ involvement in the art industry, focusing on a variety of exhibition spaces and the methods and considerations involved in the preparation, presentation and conservation of artworks.

Students are expected to visit at least two different exhibition spaces in their current year of study.

**Outcomes:**

1. Students present a cohesive folio of finished artworks, based on selected potential directions developed through the design process. These demonstrate skilful application of materials and techniques and realise and communicate their ideas.
2. On completion of this unit the student should be able to provide visual and written documentation that identifies the folio focus and evaluates the extent to which the finished artworks reflect the selected potential directions, and effectively demonstrate a cohesive relationship between the works.
3. Students should be able to examine and explain the preparation and presentation of artworks in at least two different exhibition spaces, and discuss the various roles, processes and methods involved in the exhibition of artworks.

**Assessment tasks for this unit are:**

- a folio, including: an exploration proposal, work plan, design explorations, research and resources and two or more finished artworks.
- short-answer responses in relation to artist’s works
- exhibition review
- responses to questions related to a range of art practices

**Unit 3 and 4 Assessment:**

School –assessed tasks and an end-of-year examination

- Unit 3 school-assessed coursework: 33%
- Unit 4 school-assessed coursework: 33%
- Units 3 & 4 examination: 34%
The Visual Communication Design study examines the way visual language can be used to convey ideas, information and messages in the fields of communication, environmental and industrial design. Designers create and communicate through visual means to shape the everyday quality of life for individuals, communities and societies. Visual communication design relies on drawing as the primary component of visual language to support the conception and visualisation of ideas. Consequently, the study emphasises the importance of developing a variety of drawing skills to visualise thinking.

Unit 1: Introduction to Visual Communication Design

This unit focuses on using visual language to communicate messages, ideas and concepts. This involves using design thinking skills as well as drawing skills to make messages, ideas and concepts visible and tangible. Students practise drawing 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.

Students develop an understanding of how design elements and principles affect visual messages and the way information and ideas are read and perceived. The broader context of the place and purpose of design is also investigated along with the six stages of the design process. Designers are researched along with methods used to generate ideas. Design knowledge is applied to folio work and a range of drawing skills are used to develop concepts.

Outcomes:

1. The student should be able to create drawings for different purposes using a range of drawing methods, media and materials.
2. 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.
3. Students should be able to describe how a visual communication has been influenced by past and contemporary practices, and by social and cultural factors.

Assessment tasks for this unit are:

- a folio of observational, visualisation and presentation drawings created using manual and/or digital methods
- a range of final presentations created using manual and/or digital methods
- written /annotated visual report

Unit 2: Applications of Visual Communication Design

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

Students use drawing methods that use technical drawing conventions to communicate ideas associated with environmental or industrial fields of design. Typography and imagery and how they are used are also investigated. Students further develop an understanding of the design process which helps to organise their thinking in relation to solving design problems. They present ideas in response to a brief which lead to final visual communications being made.

Outcomes:

1. Students should be able to create presentation drawings that incorporate relevant technical drawing conventions and effectively communicate information and ideas for a selected design field.
2. 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.
3. Students should be able to engage in stages of the design process to create a visual communication appropriate to a given brief.

Assessment tasks for this unit are:

- a folio of typography and image ideas and concepts created using manual and digital methods
- a folio of technical drawings created using manual and/or digital methods
- written and/or oral descriptions and analysis of historical and contemporary design examples
- a folio demonstrating the use of a design process using manual and/or digital methods
- a range of final presentations of visual communications
Unit 3: Design Thinking and Practice

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, materials and the application of design elements and design principles can create effective visual communications for specific audiences and purposes.

Students establish a brief and apply design thinking skills through the design process. A client is identified and two distinctly different needs of that client, and the purpose, target audience, context and constraints relevant to each need are investigated. The brief and investigation work underpin the developmental and refinement work undertaken in Unit 4.

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.

Outcomes:

1. In 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.
2. On completion of this unit the student should be able to describe how visual communications are designed and produced in the design industry and explain factors that influence these practices.
3. Students should be able to apply design thinking skills in preparing a brief, undertaking research and generating a range of ideas relevant to the brief.

Assessment of levels of achievement will be determined by:

School-assessed Coursework=20 %
School-assessed Task spanning Units 3 & 4 = 40 %
End-of-year examination=35 %

Unit 4: Design Development and Presentation

The focus of this unit is the development of design concepts and two final presentations of visual communications to meet the requirements of the brief completed in Unit 3. Students continue the design process by developing and refining concepts for each need stated in the brief. A range of digital and manual two- and three-dimensional methods, media and materials are used. They investigate how the application of design elements and design principles creates different communication messages with their target audience. Ongoing reflection and evaluation of design solutions against the brief assists students with keeping their ideas focused.

Students refine and present two visual communications within the parameters of the brief. They reflect and evaluate their visual communications and devise a pitch to communicate their design thinking and decision making to the client.

Outcomes:

1. On completion of this unit the student should be able to develop distinctly different design concepts for each need, and select and refine for each need a concept that satisfies each of the requirements of the brief.
2. On completion of this unit the student should be able to produce final visual communication presentations that satisfy the requirements of the brief.
3. Students should be able to devise a pitch to present and explain their visual communications to an audience and evaluate the visual communications against the brief.

Assessment of levels of achievement will be determined by:

School-assessed Coursework=5 %
School-assessed Task spanning Units 3 & 4 = 40 %
End-of-year examination=35 %
Business Management

Business Management explores the way in which people operate Australian business, which may vary in terms of size, type of ownership, purpose and location. The aims of the course are to acquire knowledge of management skills and explore the operation of management in the real world. It is recommended for students considering both professional and self-employed career paths.

Unit 1: Small Business Management
This unit focuses on the setting up and running of a small business. It covers topics such as business characteristics, the business environments, the process of planning and evaluating in small business, the management of staff in small business and the ethical and socially responsible approach taken.

Outcomes
1. Introducing business: On completion of this unit the student should be able to explain a set of generic business characteristics and apply them to a range of businesses.
2. Small business decision making, planning and evaluation: On completion of this unit the student should be able to apply decision-making and planning skills to establish and operate a small business, and evaluate the management of an ethical and a socially responsible small business.
3. Day-to-day operations: On completion of this unit the student should be able to discuss one or more of the day-to-day operations associated with an ethical and a socially responsible small business, and apply the operation/s to a business situation.

Assessment Tasks: such as case studies; business surveys; analytical exercises; business plan, topic tests.

Unit 2: Communication and management
This unit focuses on the importance of effective communication in achieving business objectives. Students develop knowledge of fundamental aspects of business communication and are introduced to skills related to its effective use in different contexts.

Outcomes
1. Communication in business: On completion of this unit student should be able to explain, apply and justify a range of effective communication methods used in business-related situations.
2. Managing the marketing function: On completion of this unit the student should be able to analyse effective marketing strategies and processes and apply these strategies and processes to business related situations.
3. Managing the public relations function: On completion of this unit the student should be able to apply public relations strategies to business-related situations and analyse their effectiveness.

Assessment Tasks: case studies, analytical exercises, topic tests, marketing investigation and city excursion.

Unit 3: Corporate Management
This unit focuses on large-scale business compared to the Small Business in Unit 1. It covers topics such as the contribution of large business to Australia; different types of large organisations; management structures, styles and skills and management’s ability to cope with change caused by technology, legislation and social responsibility.

Outcomes
1. On completion of this unit the student should be able to discuss and analyse the context in which large-scale organisations operate.
2. On completion of this unit the student should be able to discuss and analyse major aspects of the internal environment of large-scale organisations.
3. On completion of this unit the student should be able to discuss and analyse strategies related to operations management.

Unit 4: Managing people and change
This unit commences with a focus on the human resource management function. It then progresses to the analysis of the management of change. Students learn about key change management processes and strategies and are provided with the opportunity to apply these to a contemporary issue of significance.

Outcomes
1. On completion of this unit the student should be able to analyse and evaluate practices and processes related to human resource management.
2. On completion of this unit the student should be able to analyse and evaluate the management of change in a large-scale organisation, and evaluate the impact of change on the internal environment of a large-scale organisation.

Assessment Tasks for Unit 3 and 4:
- Unit 3 School-assessed Coursework: 25%
- Unit 4 School-assessed Coursework: 25%
- End-of-year examination: 50%
Legal Studies allows students to develop an understanding of the impact our legal system has upon the lives of citizens. Students apply knowledge of aspects of the legal system by examining current criminal and civil cases and experience the operation of the Victorian court system with visits to the Supreme and County courts. An educational visit to one of Victoria’s prisons including Barwon Prison provides students with a further opportunity to apply the theory they have learned to practical, real life experience.

**Unit 1: Criminal Law in action**
This unit explores the distinction between legal and non-legal rules, the Victorian court hierarchy, and the processes of making laws through Parliament. It focuses on types of crimes including murder and manslaughter, the role of police, procedures used in criminal trials, and the range of sanctions available, explores the concepts of fairness and justice.

**Outcomes:**
1. Explain the need for effective laws and describe the main sources and types of law in society.
2. Explain the key principles of criminal law, apply these principles to cases and discuss the impact of criminal activity on society.
3. Investigate the criminal courtroom and the procedures used in our courts to contribute to the achievement of justice.

**Unit 2: Issues in Civil Law -Outcomes:**
1. Explain the principles of civil law and apply them to real or hypothetical cases to justify a decision.
2. Evaluate the processes for the resolution of civil disputes and analyse the capacity of these processes to achieve justice.
3. Analyse contemporary Australian law and assess its ability to respond to issues and disputes related to particular areas of law including areas such as family law, sport and the law, will and inheritance.
4. Describe an Australian case illustrating the issue of rights and discussing the impact of the case on society and the legal system.

**Unit 3: Law-making**
This unit focuses on the principles and effectiveness of the parliamentary system.

**Outcomes:**
1. Describe the role and effectiveness of Parliament as a law-making body, evaluate the need for change in the law, and analyse the ways in which change can be influenced.
2. Explain the role of the Commonwealth Constitution in defining law making powers within the federal structure, and evaluate its effectiveness in protecting democratic and human rights.
3. Describe the role and evaluate the effectiveness of the courts in law-making and their relationship with Parliament.

**Unit 4: Resolution and Justice**
This unit explores the function and jurisdiction of the courts, tribunals and alternative avenues of dispute resolution with a view to comparing and evaluating the various dispute resolution methods.

**Outcomes:**
1. Describe and evaluate the effectiveness of institutions for the resolution of civil disputes and the adjudication of criminal cases and of alternative dispute methods.
2. Explain the elements of an effective legal system; evaluate civil and criminal procedures and their effectiveness in resolving disputes.

**Assessment:**
- Coursework Unit 3: 25%
- Coursework Unit 4: 25%
- End-of-year examination: 50%
The range of English subject choices has broadened for VCE students.

Year 11 and 12 students must study either:

- English or EAL 1-2 or Literature 1-2 in Year 11
  Followed by
- English or EAL 3-4 or Literature 3-4 in Year 12

**English or EAL**
Both units emphasise the progressive development of critical understanding and control of the English language. For Units 3 and 4, EAL students need to meet the VCAA criteria for enrolment in VCE EAL.

**Unit 1:**
**Area of Study 1:** The focus of this area of study is to explore how meaning is created in a text. Students identify, discuss and analyse decisions authors have made. They explore how authors use structures, conventions and language to represent characters, settings, events, explore themes, and build the world of the text for the reader. Students consider the similarities and differences between texts, developing awareness that some features are specific to texts, while others are similar across texts. Students are encouraged to draw on prior knowledge and supplementary material to broaden and deepen their understanding of texts.

**Area of Study 2:** In this area of study students focus on the analysis and construction of texts that attempt to influence an audience. Students read a range of texts that attempt to position audiences in a variety of ways. They explore the use of language for persuasive effect and the structure and presentation of argument. Students will practise their listening and speaking skills through discussion and debate, developing their own arguments and critiquing the arguments of others.

**Outcomes:**
1. To produce analytical and creative responses to texts.
2. To analyse how argument and persuasive language can be used to position audiences, and create their own texts intended to position audiences.

**Unit 2:**
**Area of Study 1:** Students will explore how comparing texts can provide a deeper understanding of ideas, issues and themes. They investigate how the reader’s understanding of one text is broadened and deepened when considered in relation to another text. Students explore how features of texts, including structures, conventions and language convey ideas, issues and themes that reflect and explore the world and human experiences, including historical and social contexts.

**Area of Study 2:** In this area of study students will build on their understanding of argument and the use of persuasive language in texts that attempt to influence an audience. They will develop an understanding of how texts are constructed for specific persuasive effects by identifying and discussing the impact of argument and persuasive language used to influence an audience. Students practise developing and presenting reasoned points of view on issues of contemporary social relevance. In addition to developing critical analysis of the use of language and the presentation of argument in texts, students practise presenting arguments and points of view in writing. They draft, revise and edit their writing to clarify and critique their thinking, and for precision and coherence in argument and quality of evidence.

**Outcomes:**
1. To compare the presentation of ideas, issues and themes in two texts.
2. To identify and analyse how arguments and persuasive language are used in text/s that attempt to influence an audience, and create a text which presents a point of view.

**Unit 3:**
**Area of Study 1:**
The focus of this unit is on reading and responding both orally and in writing to a range of texts. Students analyse how the authors of texts create meaning and the different ways in which texts can be interpreted. They develop competence in creating written texts by exploring ideas suggested by their reading within the chosen context, and the ability to explain choices they have made as authors.
Outcomes:
1. To analyse, either orally or in writing, how a selected text constructs meaning, conveys idea and values, and is open to a range of interpretations.
2. To draw on ideas and/or arguments suggested by a chosen Context to create written texts for a specified audience and purpose; and to discuss and analyse in writing their decisions about form, purpose, language, audience and context.
3. To analyse the use of language in texts that present a point of view on an issue currently debated in the Australian media, and to construct, orally or in writing, a sustained and reasoned point of view on the selected issue.

Unit 4:
The focus of this unit is on reading and responding in writing to a range of texts in order to analyse their construction and provide an interpretation. Students create written or multimodal texts suggested by their reading within the chosen Context and explain creative choices they have made as authors in relation to form, purpose, audience and context.

Outcomes:
1. To develop and justify a detailed interpretation of selected texts.
2. To draw on ideas and arguments suggested by a chosen Context to create written texts for a specified audience and purpose, and to discuss and analyse in writing their decisions about form, purpose, language, audience and context.

Assessment:
- Coursework Unit 3: 25%
- Coursework Unit 4: 25%
- End-of-year examination: 50%
VCE Literature focuses on the meaning derived from texts, the relationship between texts, the contexts in which texts are produced and read, and the experiences the reader brings to the texts. Students read, view and listen to stories, plays, films and poems. They learn to write creatively and analytically and to explore their own reactions to texts which they express through writing, drawing and discussion.

**Unit 1:**
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 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.

**Area of Study 1:** In this area of study students consider how language, structure and stylistic choices are used in different literary forms and types of text. They consider both print and non-print texts, reflecting on the contribution of form and style to meaning. Students reflect on the degree to which points of view, experiences and contexts shape responses to text.

**Area of Study 2:** In this area of study students investigate the ideas and concerns raised in texts and the ways social and cultural contexts are represented. They consider how texts may reflect or comment on the interests of individuals and particular groups in society and how texts may support or question particular aspects of society. Students learn to select and discuss aspects of the texts that facilitate their interpretation and understanding of the point of view being presented.

**Outcomes:**
1. Respond to a range of texts and reflect on influences shaping these responses.
2. Analyse the ways in which a selected text reflects or comments on the ideas and concerns of individuals and particular groups in society.

**Unit 2:**
In this unit students explore the ways literary texts connect with each other and with the world. They examine the ways their own culture and the cultures represented in texts can influence their interpretations and shape meanings. Drawing on a range of texts, students consider the relationships between authors, audiences and contexts.

**Area of Study 1:** In this area of study students focus on the interrelationships between the text, readers and their social and cultural contexts. Students reflect upon their own backgrounds and experience in developing responses to texts from a past era and/or another culture.

**Area of Study 2:** In this area of study students focus on the ways that texts relate to and influence each other. Students learn that meanings of texts are evolving and open to a range of interpretations and change in relation to other texts. Students consider how the reading of a text can change according to the form of the text and its context.

**Outcomes:**
1. 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.
2. Explore the ways that texts relate to and influence each other. Students learn that meaning of texts are evolving and open to a range of interpretations and change in relation to other texts.

**Assessment:**
A range of creative, interpretative, analytical texts in various forms including, written, oral and multi modal.

**Unit 3:**

**Outcomes:**
1. Demonstrate an ability to discuss how meaning changes when the form of the text is changed.
2. Analyse and interpret the views and values of a text.
3. Evaluate the views of a text and make comparisons with their own interpretations.
Unit 4:

Outcomes:
1. Respond creatively and imaginatively to a text and comment on the connections between text and the response.
2. Analyse features of the text, relating them to an interpretation of the text as a whole.

Assessment:
- School assessed coursework for Unit 3: 25%
- School assessed coursework for Unit 4: 25%
- End of year examination: 50%
The study of Health & Human Development investigates health and human development across the lifespan and enables students to examine the health of their local and global communities.

Unit 1: The health and development of Australia’s youth
This unit introduces youth as a stage of the lifespan.

Outcomes:
1. Describe the dimensions of, and the interrelationship within and between, youth health and individual human development, and analyse the health status of Australia’s youth using appropriate measurements.
2. Describe and explain the factors that have an impact on the health and individual human development of Australia’s youth, outline health issues relevant to Australia’s youth and, in relation to a specific health issue, analyse strategies or programs that have an impact on youth health and development.

Unit 2: Individual human development and health issues
Examines the role of families, communities and governments in optimising the health and development of individuals across the lifespan.

Outcomes:
1. Describe and explain factors that affect the health and individual human development during the prenatal stage.
2. On completion of this unit the student should be able to describe and explain factors that affect the health and individual human development of Australia’s children.
3. Describe and explain the factors that affect the health and individual human development of Australia’s adults.

Assessment tasks for both units may include:
- A case study analysis, data analysis, multimedia presentation, oral presentation, test and a written response.

Unit 3: Australia’s health
Examines from a health status perspective nutrition and nutritional requirements across the lifespan, and the effects of food selection on people’s health.

Outcomes:
1. Compare the health status of Australia’s population with that of other developed countries, compare and explain the variations in health status of population groups within Australia and discuss the role of the National Health Priority Areas in improving Australia’s health status.
2. Discuss and analyse approaches to health and health promotion, and describe Australia’s health system and the different roles of government and non-government organisations in promoting health.

Unit 4: Global health and human development
Examines the development and health of people in industrial and developing countries. It analyses the role of governments in terms of local and international health care provision. The unit also focuses on the genetic and environmental influences which may arise across one’s lifespan.

Outcomes:
1. Analyse factors contributing to variations in health status between Australia and developing countries, and evaluate progress towards the United Nations’ Millennium Development Goals.
2. Describe and evaluate programs implemented by international and Australian government and non-government organisations, and analyse the interrelationships between health, human development and sustainability.

Assessment:
- School assessed coursework for Unit 3 and 4: 25% each
- End of Year Examination: 50%
Outdoor & Environmental Studies

VCE Outdoor and Environmental Studies is concerned with the ways humans interact with and relate to outdoor environments. ‘Outdoor environments’ include environments that have minimum influence from humans, as well as those environments that have been subject to different levels of human intervention. For some outdoor environments provide a basis for recreation in the form of adventure, risk and challenge. For others it is a link to nature and our past, present or future. Outdoor Recreation activities enable students to develop critiques of human–nature relationships and to make informed contributions to discussions on environmental issues.

Unit 1: Exploring Outdoor Experiences: 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.

Outcomes:
1. Analyse ways in which individuals experience, understand and respond to natural environments, with reference to related outdoor experiences.
2. Evaluate factors which influence outdoor experiences.
   Possible practical experiences: Swimming, lifesaving practical exercises, surfing, snorkelling, paddling activities choosing from kayaking, canoeing, sports rafting or stand up paddle boarding and/or a coastal hike.

Unit 2: Discovering Outdoor Experiences: This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the human impacts on outdoor environments.

Outcomes:
1. Describe and compare the characteristics and interrelationships between components of two or more natural environments, with reference to related outdoor experiences.
2. Evaluate human impacts on natural environments and analyse procedures for minimising and managing these impacts, with reference to related outdoor experiences.

Possible practical experiences: Cross country skiing, an overnight snow camp, rock climbing, horse riding, bushwalking and/or mountain bike riding.

Unit 3: Relationships with Outdoor Environments: Focuses on the ecological, historical and social contexts of human relationships with outdoor environments and the associated impacts.

Outcomes:
1. Describe and analyse how particular interactions and relationships with, and perceptions of, the Australian environment have changed over time, with reference to related outdoor experiences.
2. Analyse and evaluate factors influencing contemporary relationships with natural environments, and the consequences for humans and the environment, with reference to related outdoor experiences.

Possible practical experiences: Swimming, lifesaving practical exercises, surfing, snorkelling, paddling activities choosing from kayaking, canoeing, sports rafting or stand up paddle boarding and/or a coastal hike.

Unit 4: Sustainable Outdoor Relationships: Focuses on the conservation and use of the natural environment. It acknowledges the maintenance of natural environments and examines the capacity of the natural environments to support the future needs of the world’s human population.

Outcomes:
1. Describe the contemporary state of the environment and evaluate the importance of healthy natural environments for individuals and society, with reference to related outdoor experiences.
2. Evaluate practices and strategies for sustainable interactions between humans and the environment, with reference to related outdoor experiences.

Possible practical experiences: Cross country skiing, an overnight snow camp, rock climbing, horse riding, bushwalking and/or an overnight mountain bike riding experience.

Assessment:
School assessed coursework for Unit 3: 25%
School assessed coursework for Unit 4: 25%
End of year examination: 50%
Physical Education

Physical Education is relevant to students with a wide range of expectations, including those who wish to pursue further formal study at tertiary level or in vocational education and training settings. The study prepares students for such fields as human movement, nursing or physiotherapy, as well as providing valuable knowledge and skills for participating in their own sporting and physical activity pursuits.

Unit 1: Bodies in Motion
This unit introduces students to the relationship between the human body systems and physical activity. It focuses on the contribution of physical activity to the benefit of individuals and the wider community.

Outcomes:
1. Explain how the musculoskeletal, cardio-respiratory and energy systems function during physical activity, including how the energy systems work together to enable physical activity to occur.
2. Explain the impact of participation in physical activity on the health of selected population(s) and analyse factors affecting participation in physical activity

Unit 2: Sports Coaching and Physically Active Lifestyles
This unit analyses the processes of physical skill development in relation to performance. It also explores the relationship which physical skill performance has with the scientific field of biomechanics.

Outcomes:
1. Explain the application of biomechanical and skill learning principles in analysing how motor skills are learnt and improved.
2. Identify and evaluate a range of coaching practices that lead to enhanced sports performance.

Assessment Tasks for both units may include:
1. Class tests and written reports.
2. Practical involvement and practical reports
3. Case study reviews and laboratory activities

Unit 3: Physiological and participatory perspectives of physical activity
This unit introduces students to an understanding of physical activity from a physiological perspective. In particular, the contribution of the energy systems to performance in physical activity is explored, as well as the health benefits to be gained from participation in regular physical activity.

Outcomes:
1. Analyse individual and population levels of participation in physical activity, and evaluate strategies that promote adherence to the National Physical Activity Guidelines
2. Analyse the role and relative contribution of the energy systems during physical activity.

Unit 4: Enhancing physical performance
Improvements in physical performance, in particular fitness, depend on the ability of the individual or coach to acquire, apply and evaluate knowledge and understanding about training. Students experience a variety of practical activities involving a range of training methods and fitness activities. Students learn to accurately assess the particular energy and fitness needs of the sport or activity for which the athlete is training, through analysis of data collected from a game or activity.

Outcomes:
1. Plan and evaluate training programs to enhance physical fitness
2. Evaluate practices and/or strategies that are used in conjunction with each other to enhance sports performance
Assessment tasks:
1. Class tests and written reports
2. Practical involvement and practical reports
3. Case study reviews and laboratories
4. Class project/report.

Assessment:

- School-assessed coursework for Unit 3: 25%
- School-assessed coursework for Unit 4: 25%
- End-of-year examination: 50%
History of the 20th Century

Unit 1: Twentieth century history 1918 – 1939
The end of the First World War marks a period of great change in History, and one that would have an impact for many decades to come. The period between the wars was marked by great social change. Post-war treaties reshaped countries, ideologies and power structures. Economic instability caused by the Great Depression also contributed to the development of political movements and fascist governments that used the military, education and propaganda to impose controls on the way people lived, to exclude particular groups of people and to silence criticism. Despite ideals about future peace, and the establishment of the League of Nations, by 1939, the world was again overtaken by war.

Outcomes:
1. Analyse and 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.
2. Evaluate and 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.

Unit 2: Twentieth century history 1945 – 2000
The development of the United Nations and The Universal Declaration of Human Rights was intended to take an internationalist approach to avoiding warfare, resolving political tensions and addressing threats to human life and safety. Despite this, the post-World War Two period was characterised by ongoing tensions caused by the competing ideologies of democracy and communism.

Outcomes:
1. Analyse Evaluate the impact of post war challenges to establish social and political power and analyse the nature, development and impact of the Cold War.
2. 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.

Assessment tasks for both units:
- Analytical exercises, Short reports, Essays, Oral presentations, Multimedia presentations, Film reviews, Biographical studies, Responses to literature, Tests, Document analysis.
- A majority of the assessment tasks must be presented in a written form and one must involve an analysis of visual evidence.

History of Revolutions

Unit 3: The French Revolution
The French Revolution changed the world political scene and ushered into brief existence a monolithic form of government based on terror. How did it occur? What happened to cause it? Was it one or more revolutions followed by an armed takeover of government by an organised minority? Who were the leaders and what motivated them? How had the old society been changed by the revolution?

Unit 4: The Russian Revolution
Every revolution has its pivotal moment, its crisis or crises that define the course of the revolution – the moment or moments in time when the revolution could either fail or succeed. In the case of the Russian Revolution, was the crisis the Civil War? What was the outcome? What were the lasting results of the Revolution? What had changed? What had remained the same?

Outcomes and Assessment
1. Evaluate the role of ideas, leaders, movements and events in the development of the revolution.
2. Analyse the challenges faced by the emerging new order, and the way in which attempts were made to create a new society, and evaluate the nature of the society created by the revolution.

Assessment tasks
- Analysis of visual and written documents, research report, historiographical exercise and an essay.
- Unit 3 and Unit 4 school-assessed coursework: 25% each
- End-of-year examination: 50%
The rapid pace of development in information and communications technology (ICT) is having a major influence on virtually all aspects of society. Not only does ICT provide the capacity to change how tasks and activities are undertaken, but it also creates new opportunities in work, study, recreation, and in relationships. Computing subjects at VCE level are for students who wish to learn more about ICT and gain skills sought after by employers.

**Unit 1:**
In this unit we look at how data, information and networked digital systems can be used to meet a range of current and future needs. We develop skills in html programming and web design as well as designing wireless and mobile networks as well as considering security controls to protect stored and transmitted data.

**Outcomes:**
1. Collect, secure and interpret data, and design and develop a graphical representation of the data.
2. Design a network with wireless capability that meets the requirements of a client, explain its configuration and predict risks and benefits for the client.
3. Contribute collaboratively to the creation of a website that presents an analysis of a current ICT issue and presents the team’s point of view.

**Unit 2:**
This unit focuses on how computers are used to solve problems by automating the processing of data. We will also be developing skills in programming and the design and use of databases to handle large amounts of data.

**Outcomes:**
1. Demonstrate progression in the ability to use a programming language, record the learning progress electronically, and explain possible career pathways that require the use of the skills.
2. Develop graphical representations of large data sources.
3. Design and develop a database to meet the needs of a client.

**Assessment:**
- Designing, developing and evaluating solutions using ICT
- Exams
- Written reports, Presentations

**Informatics**

**Unit 3:**
In this unit we will investigate data and how it is acquired, managed, manipulated and interpreted to meet a range of needs. We will investigate the way organisations acquire data using interactive online solutions, such as websites and applications (apps), and consider how users interact with these solutions when conducting online transactions. We will examine how relational database management systems (RDBMS) store and manipulate data acquired this way and use software to create diagrams that depict how users interact with online solutions, and develop skills in the use of an RDBMS to create a solution to a problem.

**Outcomes:**
1. Design a solution to a problem, develop it using a relational database management system, and diagrammatically represent how users interact with an online solution when supplying data for a transaction.
2. A project to acquire, prepare, manipulate and interpret complex data and formulate a project plan to manage progress.
Unit 4:
In this unit we will investigate techniques for manipulating, managing and securing data and information to meet a range of needs. We will take the work from the project in Unit 1 and create design, develop and evaluate a multimodal, online solution that effectively communicates the conclusion and findings. We will also investigate how organisations manage the storage and disposal of data and information to minimise threats to the integrity and security of data and information.

Outcomes:
1. Design, develop and evaluate a multimodal online solution based on the project from Unit 1.
2. Evaluate the effectiveness of the strategies used by an organisation to manage the storage, communication and disposal of data and information, and recommend improvements.

Assessment:
- Unit 3 school-assessed coursework
- Unit 4 school-assessed coursework
- End-of-year examination

Software development

Unit 3:
In this unit we create purpose-designed solutions using a programming language. We will develop a set of working modules through the use of a programming language and examine a range of software design representations and interpret these when applying specific functions of a programming language to create working modules. We also analyse a need, plan and design a solution and develop computational, design and systems thinking skills.

Outcomes:
1. Interpret designs and apply a range of functions and techniques using a programming language to develop working modules.
2. Analyse and document a need, generate alternative design ideas, represent the preferred solution design and formulate a project plan for creating the solution.

Unit 4:
In this unit we will investigate how the information needs of individuals and organisations are met through the creation of software solutions used in a networked environment. We will develop computational thinking skills by transforming our detailed design prepared in Unit 3 into a software solution. Finally we will apply systems thinking skills to explain the relationship between two information systems that share data and how that dependency affects the performance of the systems.

Outcomes:
1. Create a solution using a programming language that meets the identified requirements and assess the effectiveness of the project plan in monitoring progress.
2. Analyse and explain the dependencies between two information systems and evaluate the controls in place in one information system to protect the integrity of its source data.

Assessment:
- Unit 3 school-assessed coursework
- Unit 4 school-assessed coursework
- End-of-year examination
Italian (other languages may be studied via Distance Education or the VSL)
The areas of study for Italian comprise themes and topics, grammar, text types, vocabulary and kinds of writing. These areas of study are common to all four units of the study, and they are designed to be drawn upon in an integrated way, as appropriate to the linguistic needs of the student, and the outcomes for the unit. The themes and topics are the vehicle through which the student will demonstrate achievement of the outcomes, in the sense that they form the subject of the activities and tasks the student undertakes
There are three prescribed themes:
- The individual
- The Italian speaking communities
- Changing work

Unit 1:
Outcomes:
1. Establish and maintain a spoken or written exchange related to personal areas of experience.
2. Listen to, read and obtain information from written and spoken texts.
3. Produce a personal response to a text focusing on real or imaginary experience.

Unit 2:
Outcomes:
1. Participate in a spoken or written exchange related to making arrangements and completing transactions.
2. Listen to, read and extract and use information and ideas from spoken and written texts.
3. Give expression to real or imaginary experience in written or spoken form.

Assessment tasks Units 1 & 2:
- Informal conversation, Reply to personal letters/e-mail/fax, Role plays, Interviews, Listening and reorganising information and ideas from spoken texts, Journal entries, Short stories, Articles

Unit 3:
Outcomes:
1. Express ideas through the production of original texts.
2. Analyse and use information from spoken texts.
3. Exchange information, opinions and experiences.
Assessment tasks
- A 250-word personal or imaginative written piece
- A response to specific questions, messages or instructions, extracting and using information requested
- A three to four minute role-play, focusing on the resolution of an issue

Unit 4:
Outcomes:
1. Analyse and use information from written texts
2. Respond critically to spoken and written texts, which reflect aspects of the language and culture of Italian speaking communities.
Assessment tasks:
- A response to specific questions, messages or instructions, extracting and using information requested.
- A 250-300 word informative, persuasive or evaluative written response, for example, report, comparison or review.
- A three to four minute interview on an issue related to texts studied.
Assessment:
- School assessed coursework for Unit 3: 25%
- School assessed coursework for Unit 4: 25%
- End of year examinations: 50%
Mathematics

Mathematics is not compulsory at the VCE level; however it is a pre-requisite for many University and TAFE courses. You should think very carefully about your future career path when selecting the level of mathematics to take at senior level. To suit the variety of student needs, different subjects are available at each level.

Units 1 & 2: Foundation Mathematics, General Mathematics, Mathematical Methods and Specialist Mathematics

Units 3 & 4: Further Mathematics, Mathematical Methods and Specialist Mathematics

Foundation Mathematics (Units 1 & 2)
This is designed for students of mathematics who require a year 11 pass in maths, but who will not undertake any further studies in Mathematics. This unit covers mathematical skills to support other VCE subjects, including VET. In Foundation Mathematics there is a strong emphasis on using mathematics in practical contexts relating to everyday life, recreation, work and study. Students are encouraged to use appropriate technology in all areas of their study.

Please note that this subject should only be taken by students who genuinely want a year 11 pass in mathematics.

Areas of Study: Space, shape and design, patterns and number, data, measurement.

This subject can lead on to Unit 3 & 4 Further Mathematics but students would need to do additional work in preparation for units 3&4.

General Maths (Units 1 & 2)
This is a general course of study which provides for a wide variety of needs:

- Skills for those who will not study Mathematics at Unit 3 & 4 level.
- Preparation for those students who will study Further Mathematics Units 3 & 4.

Areas of Study: Algebra and structure, arithmetic and number, discrete mathematics, geometry, measurement and trigonometry, graphs of linear and non-linear relations and statistics.

Assessment for Units 1& 2: The following items are used to measure student achievement of the outcomes: assignments, tests, projects, problem solving tasks, modelling tasks, practical activities and an end of unit exam.

This subject leads to Further Mathematics Units 3 & 4.

Maths Methods (Units 1 & 2)
Students must purchase the CAS calculator for this subject
This subject is for strong students of Mathematics. A good understanding of algebra and high achievement on the Year 10 Exams are essential to study this unit. The subject covers skills and knowledge required for Unit 3 & 4 Mathematical Methods and Specialist Mathematics.

Areas of Study: Functions and graphs, Algebra, Calculus, Probability and Statistics.

Assessment for Units 1& 2: The following items are used to measure student achievement of the outcomes: assignments, tests, projects, problem solving tasks, modelling tasks, and an end of unit exam.

This subject leads to Further Mathematics Units 3 & 4, Mathematical Methods Units 3 & 4 and Specialist Mathematics Units 3 & 4.

Specialist Maths (Units 1 & 2)
Students must purchase the CAS calculator for this subject
This subject is for strong students of Mathematics who have a genuine interest in maths and a desire to study maths at an in-depth level. An excellent understanding of algebra and very high achievement on the Year 10 Exams are essential to study this unit. The subject covers skills and knowledge required for Unit 3 & 4 Mathematical Methods and Specialist Mathematics.

Areas of Study: Algebra and structure, Arithmetic and number, discrete mathematics, Geometry, measurement and trigonometry, Graphs of linear and non-linear relations and Statistics.

Assessment for Units 1& 2: The following items are used to measure student achievement of the outcomes: assignments, tests, projects, problem solving tasks, modelling tasks, use of technology and an end of unit exam.

This subject leads to Further Mathematics Units 3 & 4, Mathematical Methods Units 3 & 4 and Specialist Mathematics Units 3 & 4.

Further Mathematics (Units 3 & 4)
Students must purchase the CAS calculator for this subject
Provides general preparation for both employment and further study and may be taken alone, or with Maths Methods Units 3 & 4. It is assumed that students have successfully completed General Mathematics Units 1 & 2.

Note: This subject should be considered by all students of Maths Methods 3&4 as an extra subject in Year 12. The content is considerably less challenging than Methods and with the appropriate work ethic students should achieve very strong results.
Areas of Study:

1. Core: Data analysis and Recursion and financial modelling
2. Applications: selected from Matrices, Networks and decision mathematics, Geometry and measurement and Graphs and relations

Assessment in Units 3 & 4:
- guided investigations of a given data set with several variables
- modelling or problem-solving tasks
- exams

The student’s level of achievement will be determined by:
School assessed coursework (34%) and two end-of-year examinations (66%)
Exam 1: facts, skills and application tasks
Exam 2: analysis task

Mathematical Methods (Unit 3 & 4)
Students must purchase the CAS calculator for this subject
A good understanding of and strong exam results in Mathematical Methods Units 1 & 2 are required for this unit. Math Methods provides an appropriate background for further study in the Sciences, Business, Medicine or Computing.
Areas of Study: Functions and graphs, Calculus, Algebra and Probability and statistics.
Assessment in Units 3 & 4:
- function and calculus-based mathematical investigation of a practical or theoretical context
- modelling or problem-solving task

The student’s level of achievement will be determined by:
School assessed coursework (34%) and two end-of-year examinations (66%)
Exam 1: 1 hour technology free exam
Exam 2: 2 hour using graphics calculator

Specialist Mathematics (Units 3 & 4)
Students must purchase the CAS calculator for this subject
Intended for those students with a strong interest in Mathematics and those who wish to undertake further study in Mathematics and related areas. Students taking Specialist Mathematics must also take Mathematical Methods Units 3 & 4. Excellent results in Maths Methods Units 1 & 2 and or Specialist Mathematics Units 1 & 2 is a perquisite for this unit.
Areas of Study: Functions and graphs, Algebra, Calculus, Vectors, Mechanics and Probability and statistics.
Assessment in Units 3 & 4:
- mathematical investigation of a practical or theoretical context
- modelling or problem-solving task

The student’s level of achievement will be determined by:
School assessed coursework (34%) and two end-of-year examinations (66%)
Exam 1: 1 hour technology free exam
Exam 2: 2 hour using graphics calculator

Combinations of Mathematics units

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<td>Specialist Mathematics</td>
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* For this combination of units students wishing to progress to Further Mathematics Units 3 and 4 will need to undertake some supplementary study with respect to assumed knowledge and skills for Area of Study 1.
** For this combination of units students will need to undertake some supplementary study with respect to assumed knowledge and skills for Specialist Mathematics Units 3 and 4.
Unit 1: How do living things stay alive?
The investigation of living things, how they are put together and how they interact with each other, is the theme that runs through this study. We will be investigating the structure and function of living things from single-celled bacteria to the largest of animals and plants. During the year we will isolate, grow and analyse cells using a range of techniques including chemical staining and microscope work. We will investigate the inner workings of worms, toads and small mammals and we will investigate the development of modern medicine and how drug therapies and surgery have built on our understanding of living things. Experimental work will see us creating our own hypotheses and designing and carrying out experiments to test them.

Outcomes:
1. Investigations into the structure and function of bacterial, animal and plant cells
2. Collection and study of specific animals in the local environment
3. Student designed experimental investigation into animal survival

Unit 2: How is continuity of life maintained?
Reproduction and genetics are the focus of this unit during which DNA is investigated including how it is replicated and how it controls both structure and function of cells. We will be breeding colonies of fruit flies to study the inheritance of wings shape and eye colour over successive generations.

Outcomes:
1. Investigation into changes within the cell cycle and how they might impact cellular function and identify the role of stem cells in cell growth, cell differentiation and in medical therapies.
2. Carry out research using live colonies of fruit flies, predict and analyse the results and discuss genetic screening decision making related to inheritance
3. Investigation into reproductive science

Assessment (units 1 & 2):
- Experimental work, Scientific Investigation, Research – both first and second hand data
- Exams

Unit 3 Signatures of Life
What sets living things apart from non-living? How do organisms, at a molecular level, synthesise biomacromolecules like proteins and nucleic acids? How does DNA control the functions of cells and how can we use our understanding of protein structure to produce new drugs to fight diseases as diverse as influenza and cancer? We will investigate how organisms cope with changing conditions and maintain a constant, internal environment. We will also look at the role of microorganisms in disease and how the body’s immune system responds to invaders.

Outcomes:
1. Students will conduct practical work and investigate a variety of biochemical processes.
2. Students will explain the stimulus response model in coordination and regulation and how the human immune system responds to invaders at the molecular level and provide immunity.

Unit 4 Continuity and Change
Why do children often look like their parents? How do noses “run” in a family? How are we using our understanding of genetics to change the development of living things including us? We will be investigating the role of genetics in helping us understand how life has changed over time and how technology can be used to influence changes by manipulating DNA. Students investigate the process of natural selection as a mechanism for evolution.

Outcomes:
1. Students will analyse evidence for the molecular basis of heredity and patterns of inheritance.
2. Students will investigate evidence for evolutionary change and evolutionary relationships and describe mechanisms for change including the effect of human intervention on evolutionary processes through selective breeding and the applications of biotechnology.

Assessment:
- School-assessed coursework for Unit 3: 20%.
- School-assessed coursework for Unit 4: 20%
- End-of-year examination: 60%
Chemistry explores and explains the composition and behaviour of matter and the chemical processes that occur on Earth and beyond. Chemical models and theories are used to describe and explain known chemical reactions and processes. Chemistry underpins the production and development of energy, the maintenance of clean air and water, the production of food, medicines and new materials, and the treatment of wastes.

**Unit 1: How can the diversity of materials be explained?**
The story of chemistry begins with the building of the Periodic Table and the development of atomic structure. Through experimentation students study the models for metallic, ionic and covalent bonding. They consider the widespread use of polymers as an example of the importance of chemistry to their everyday lives.

**Outcomes:**
1. Students 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.
2. On completion of this unit 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.
3. On completion of this unit the student should 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.

**Unit 2: What makes water such a unique chemical?**
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.

**Outcomes:**
1. On completion of this unit the student should be able to write balanced equations and apply these to qualitative and quantitative investigations of reactions involving acids and bases, the formation of precipitates and gases, and oxidants and reductants.
2. On completion of this unit the student should be able to explain how chemical reactions and processes occurring in the atmosphere help to sustain life on earth.

**Assessment (Units 1 and 2):**
- Practical work, Reports, Presentations, Modeling, Concept maps, Tests, Exams

**Unit 3: Chemical pathways**
In this unit students investigate the scope of techniques available to the analytical chemist. Chemical analysis is vital in the work of the forensic scientist, the quality control chemist at a food manufacturing plant, the geologist in the field, and the environmental chemist monitoring the health of a waterway. Students investigate organic reaction pathways and the chemistry of particular organic molecules. A detailed knowledge of the structure and bonding of organic chemicals is important to the work of the synthetic organic chemist. In the wake of the work done on the genome project, synthesis of new medicines is one of the growth industries for the coming decades. Students investigate the role of organic molecules in the generation of biochemical fuels and forensic analysis.

**Outcomes:**
1. Evaluate the suitability of techniques and instruments used in chemical analyses.
2. Identify and explain the role of functional groups in organic reactions and construct reaction pathways using organic molecules.

**Unit 4: Chemistry at work**
In this unit students investigate the industrial production of chemicals and the energy changes associated with chemical reactions. Our society uses a range of energy sources, including coal to generate electricity and gas for heating, oil for transport, and solar and wind for small and large scale production of electricity. Students investigate the renewability of a range of energy sources and consider their energy efficiencies.

**Outcomes:**
1. Analyse the factors that determine the optimum conditions used in the industrial production of the selected chemical.
2. Analyse chemical and energy transformations occurring in chemical reactions.

**Assessment:**
- Unit 3 school-assessed coursework: 20 %
- Unit 4 school-assessed coursework: 20 % - End of year examination 60%
The study of Physics, by increasing understanding of the physical and social environment, has led to developments, which have profoundly influenced the world. As Physicists explore concepts, theories evolve and often require the detection, description and explanation of things that cannot be seen. Students consider thermal concepts by investigating heat and probe common analogies used to explain electricity, consider the origins and the formation of matter.

Unit 1: What ideas explain the physical world?
Outcomes:

1. Apply thermodynamic principles to analyse, interpret and explain changes in thermal energy in selected context.
2. Describe the environmental impact of human activities with reference to thermal effects and climate science concepts.
3. Investigate and apply DC circuit model to simple battery-operated devices, household electrical systems and describe the safe and effective use of electricity by individuals and the community.
4. Describe and explain the origins of atoms, the nature of subatomic particles and how energy can be produces from the nucleus.

Unit 2: What do experiments reveal about the physical world?
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 lead to experiments. This unit investigates the way forces are involved both in moving objects and in keeping objects stationary. Students choose one from a choices of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear physics, optics, sound and sport science. Options enable students to pursue an area of interest by investigating a selected question.

Outcomes:

1. How can motion be best described, students observe motion and explore the effects of balanced and unbalanced forces.
2. One option is selected from twelve each option is based on a different observation of the physical world.
3. Practical investigation. Students should be able to design and undertake an investigation of a physics question related to scientific inquiry processes of data collection and analysis and draw conclusions based on the evidence collected.

Assessment (Units 1 and 2):
- Annotated folio of practical investigation, Data analysis, Short reports, oral, poster or multimedia presentations
- Preparation of web pages, Demonstrations, Scientific Poster, Digital presentation, Practical work, including written reports, Tests.

Unit 3:
This unit covers the areas of Newtonian motion, and a detailed look at electronics and photonics.
Outcomes:

1. Describe the wave model of sound and apply it to both the behaviour of sound and sound related technology.
2. Analyse and interpret electronic systems as combinations of basic electronic devices.

Unit 4:
This unit covers the nature of fields and power generation, diverse ideas about light and matter, and explores principles structures and materials.

Outcomes:

1. Explain and apply concepts of power generation and electric and magnetic fields.
2. Relate aspects of the wave-particle model to the nature of light and matter.
3. Compare the properties of construction materials and describe the forces acting when materials are arranged and connected in different ways to form structures.

Assessment:
- School-assessed coursework for Unit 3: 16%
- School-assessed coursework for Unit 4: 24%
- End-of-year examination: 60%
Psychology

Psychology is the systematic scientific study of thoughts, feelings and behaviours and as a science aims to describe, explain and predict human behaviour. The study of Psychology leads to numerous opportunities in a range of careers, allowing you to work with children, adults, families and communities in areas such as sport, education, forensic or health.

Unit 1: How are behaviour and mental processes shaped?
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, explore brain plasticity and consider the complex nature of psychological development.

Outcomes:
1. Describe how the 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.
2. 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.
3. Investigate and communicate a substantiated response to a question related to brain function and/or development.

Unit 2: How do external factors influence behaviour and mental processes?
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, evaluate the role social cognition plays in a person’s attitudes, perceptions and relationships, and explore a variety of factors that influence individual and group behaviour.

Outcomes:
1. Compare the sensations and perceptions of vision and taste, and analyze factors that may lead to the occurrence of perceptual distortion.
2. Identify factors that influence individuals to behave in specific ways, and analyze ways in which others can influence individuals to behave differently.
3. Design and undertake a practical investigation related to external influences on behavior, and draw conclusion based on evidence from collected data.

Assessment (Units 1 and 2):
- Empirical research activities, Tests, Classroom presentations, Essays, Comprehension questions, Analysis of research design, Investigation reports

Unit 3: The Conscious Self
This unit focuses on the study of the relationship between the brain and the mind through examining the basis of consciousness, behaviour, cognition and memory.

Outcomes:
1. Explain the relationship between the brain, states of consciousness including sleep, and behaviour, and describe the contribution of selected studies and brain research methods to the investigation of brain function.
2. Compare theories that explain the neural basis of memory and factors that affect its retention, and evaluate the effectiveness of techniques for improving and manipulating memory.

Unit 4: Brain, Behaviour & Experience
This unit develops understanding of the effect of learning on behaviour. Different concepts of normality are explored, including differentiating between normal responses such as stress to external stimuli, and mental disorders.

Outcomes:
1. Explain the neural basis of learning, and compare and contrast different theories of learning and their applications.
2. Differentiate between mental health and mental illness, and use a biopsychosocial framework to explain the causes and management of stress, simple phobia and a selected mental disorder.

Assessment:
- School-assessed coursework for Unit 3: 20%
- School-assessed coursework for Unit 4: 20%
- End-of-year examination: 60%
The study of Food and Technology is an engaging subject, which challenges students to understand the links between food, food processing, nutrition, health and well-being in a contemporary society. There are many exciting changes in the food industry and students will have accessible information to enhance their understanding of foods. Food and Technology offers students a wonderful opportunity to make informed decisions and develop essential skills in food preparation and cooking. It allows for creativity and individuality as well as providing an excellent basis for “everyday life” and meal planning. There is a strong emphasis on the integration of practical work and theoretical knowledge. This study may also provide a foundation for exciting pathways to food science, food technology, consumer science, home economics, education, hospitality, manufacturing, nutrition and health studies.

**Unit 1: Food safety and properties of food**

**Area of Study 1: Keeping food safe**
Provides students with an understanding of the work practices involved in ensuring that food is safe for consumption, for example analyse any hazards that can cause food contamination.

**Area of Study 2: Food properties and preparation**
Provides students with an opportunity to investigate the different properties and functions of key foods. They will apply this knowledge to a variety of cooking techniques and ultimately understand how this knowledge can enhance their enjoyment of food. For example prepare foods from the key food groups and compare sensory and physical pro

**Outcomes**

1. Students should be able to explain and apply safe and hygienic work practices when storing, preparing and processing food.

2. Students should be able to analyse the physical, sensory, chemical and functional properties of key foods, and select, prepare and process foods safely and hygienically to optimize these properties using the design process.

**Assessment**
- Production work and records of production
- Designing and developing a solution in response to design briefs
- Written tests
- Practical tests
- Written reports on a food testing and product evaluation
- Poster, brochure or multi-media presentations

**Unit 2: Planning and preparation of food**

**Area of Study 1: Tools, equipment, preparation and processing**
Students research, analyse and apply the most suitable food preparation and cooking methods to ensure best outcomes. For example investigating food preparation and cooking methods that maximise nutrient content of food.

**Area of Study 2: Planning and preparing meals**
Students work individually and in teams, using problem solving skills to plan and prepare meals for a range of contexts. For example plan and prepare meals to meet a variety of design briefs such as quick and easy family meals, planning restaurant meals and preparing for special occasions.

**Outcomes**

1. Students should be able to use a range of tools and equipment to demonstrate skills and implement processes in the preparation, processing, cooking and presentation key foods to maximise their properties.

2. Student should be able, individually and as a member of a team, to use the design process to plan, safely and hygienically prepare and evaluate meals for a range of contexts.

**Assessment**
- Production work and records of planning and production
- Designing and developing solutions in response to a design brief
- Short written reports and product evaluation
- Presentation on technological advances in the food industry
- Developing menus for special occasions and implementation
- Written and practical tests
Unit 3: Food preparation, processing and food controls

Area of Study 1: Maintaining food safety in Australia
In this area of study students develop an understanding of the roles and responsibilities of the relationship between the national, state and local authorities that govern food laws and standards to maintain food safety in Australia, including the production of safe food and the labelling of manufactured products. Students examine the causes of food spoilage and food poisoning and the practices followed to prevent them occurring. They investigate how the HACCP system is used in the food industry to ensure that safe and hygienic food is produced.

Area of Study 2: Food preparation & Processing
In this area of study students demonstrate understanding of key foods and the primary and secondary processes that are applied to them. They examine the natural food components of key foods and analyse how their functional properties may have an impact on food preparation, processing and preservation techniques of key foods, while following food safety and hygiene requirements.

Area of Study 3: Developing a design plan
In this area of study students develop a design plan to meet the requirements of a specific design brief. They initially develop a design brief and evaluation criteria drawn from the design brief. They then investigate its specifications, consider and justify food item choices and develop a design plan to be implemented in Outcome 1, Unit 4.

Unit 4 Food product development and emerging trends

Area of Study 1: Implementing a design plan
In this area of study students apply design and product development processes. They develop individual production plans for the four to six food items proposed in Unit 3, Outcome 3.

Area of Study 2: Food product development
In this area of study students investigate the impact of primary food production on the environment and changes being made to achieve more sustainable farming practices. They also investigate environmental issues in food manufacturing and packaging. Students consider the types of food product development and the driving forces related to these developments. They examine the process of commercial food product development from the design brief and planning stage to the prototype, production, packaging, labelling, marketing and evaluation of the final product. Students explore new and emerging foods and innovations in food product development as a result of social pressures, consumer demands and expectations. They explore the impact of technology on food production and packaging, and the development of new food products.

Assessment
Includes a selection of the following tasks:-

- keeping records of planning (production portfolio)
- developing solutions to a design brief
- short written tests
- written reports
- oral report/ multi-media, production work
- Unit 3 school - assessed coursework: 15%
- Unit 4 school - assessed coursework: 15%
- Units 3 and 4 school – assessed task: 40%
- End of year examination: 30%
Systems Engineering (Mechanical/Electrical)

Systems Engineering is designed to enable students to experience a range of files relating to the engineering and electrical/electronic areas. Systems Engineering provides an opportunity for students to develop knowledge and skills related to the design, operation, construction, maintenance, fault-finding, testing, repair and evaluation of technological systems.

**Unit 1: Introduction to Mechanical Systems**

This unit focuses on mechanical engineering fundamentals as a basis for understanding principles and concepts that operate in both simple and complex mechanical devices. The unit allows for a “hands-on” approach, as students apply their knowledge and construct functional systems that can be purely mechanical or electro-mechanical.

**Outcomes:**

1. Recognise, identify, illustrate and use theoretical principles of mechanical systems.
2. Use appropriate processes in designing, planning, manufacturing, testing, fault finding and evaluating a functional system.

**Assessment tasks:**

1. Assignment based on mechanical principles.
2. Logbook of construction task.
3. Tasks based on theory of engineering.

**Unit 2: Introduction to Electrotechnology Systems**

This unit focuses on fundamental electro technology engineering principles. Through the application of their knowledge students will produce a basic system which should employ a level of integration between mechanical and electrical/electronic components. Students will apply their knowledge and skills to research and produce a technical report.

**Outcomes:**

1. Recognise, identify and use theoretical principles of electrotechnology systems
2. Design, plan and produce a functional integrated system with reference to relevant Australian standards.

**Assessment tasks:**

1. Assignment on circuit components.
2. Logbook of construction task.
3. Tasks based on theory of and history of electronic circuits.

**Unit 3 & 4:**

**Systems engineering and energy / Integrated and controlled systems engineering**

These units involve the study of the principles and concepts associated with integrated systems. The focus is on the functional integration of a mechanical subsystem with an electrical/electronic subsystem and the design factors to be considered. One substantial production may be undertaken across both Units 3&4.

**Unit 3 Areas of Study:**

This unit builds on the principles of engineering learnt in units 1 & 2. Students will explore engineering terms and look at the fundamentals of engineering. Students will look at alternative energy sources and look at ideas for a sustainable future.

The main areas of studies are:

1. Controlled integrated systems engineering
2. Energy use and effects on engineering systems and the environment

Outcomes:
1. Recognise, identify and explain the principles of controlled integrated technological systems
2. Analyse and compare the environmental benefits and implication of using different energy sources.

Unit 4 Areas of Study:

This unit looks at existing systems. Students will look at a system and identify components and processes.

The main areas of studies are:
1. Integrated systems and control
2. Design, produce, test and evaluate a controlled technological system.

Outcomes:
1. Recognise, identify and explain the principles and function of controlled integrated systems
2. Select components for construction, fault finding and repair of an integrated system provide an evaluation and report on the performance and management of the project.

Assessment:
- School-assessed coursework for Unit 3: 10%
- School-assessed coursework for Unit 4: 10%
- School-assessed task for Unit 3/4: 50%
- End-of-year Examination: 30%
**Note: we will offer Unit 1 & 2 in 2016 and Units 3 & 4 in 2017**

Product design is part of people’s responses to changing needs to improve quality of life by designing and creating products. Product design is enhanced through knowledge of social, technological, economic, historic, ethical, legal, environmental and cultural factors.

Central to VCE Product Design and Technology is the Product design process, which provides a structure for students to develop effective design practice. The design process involves identification of a real need that is then translated into a design brief. The need is investigated and solutions are researched. These take the form of physical, three-dimensional functional products. These products can be made from a range of construction materials such as wood, metal, textile and plastic. Development of solutions require the application of technology and a variety of skills, including creative design thinking, drawing and computer-aided design, testing processes and materials, planning, construction, fabrication and evaluation.

In VCE Product Design and Technology students assume the role of a designer-maker. In adopting this role, they acquire and apply knowledge of factors that influence design. Students address the design factors relevant to their design situation. The knowledge and use of resources is integral to product design. These resources include a range of materials, and the tools, equipment and machines needed to transform these materials in a safe manner into useful products. Increasingly, the importance of environmental sustainability is having an impact on product design and development and this is an important focus of Product Design and Technology at VCE level.

**Unit 1: Product Re-design and Sustainability**

This unit focuses on the analysis, modification and improvement of a product design with consideration of the materials used and issues of sustainability. Knowledge of material use and suitability for particular products is essential in product design. Additionally, knowledge of the source, origin and processing of materials is central to sustainable practices. Students consider the use of materials from a sustainable viewpoint. Sustainable practices claimed to be used by designers are examined.

**Outcomes:**
1. Students should be able to re-design a product using suitable materials with the intention of improving aspects of the product’s aesthetics, functionality or quality, including consideration of sustainability
2. Students should be able to use and evaluate materials, tools, equipment and processes to make a re-designed product or prototype, and compare the finished product or prototype with the original design.

**Assessment tasks for this unit are selected from the following:**
- design folio that contains a design brief, evaluation criteria, research, visualisations and design options, working drawings, production plan, and evaluation report
- prototype or product and records of production and modifications
- multimedia presentation supported by speaker’s notes
- short written report that includes materials testing or trialling activities, industry visits, technical report
- case study analysis
- oral report supported by notes and/or visual materials.

**Unit 2: Collaborative design**

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: human 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 examine the use of ICT to facilitate teams that work collaboratively but are spread across the globe. In Area of Study 1, students work both individually and as members of a small design team to address a problem, need or opportunity and consider the associated human-centred design factors. They design a product within a range, based on a theme, or a component of a group product. They research and refer to a chosen style or movement. In Area of Study 2 the product produced individually or collectively is evaluated.
Outcomes:
1. Students should be able to design and plan a product, a product range or a group product with component parts in response to a design brief based on a common theme, both individually and within a team.
2. Students should be able to justify, manage and use appropriate production processes to safely make a product 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 against the design brief.

Assessment tasks for this unit are selected from the following:
• design folio that contains a design brief, evaluation criteria, research, visualisations and design options, working drawings, production plan, and evaluation report
• product and records of production and modifications
• multimedia presentation supported by speaker’s notes
• short written report that includes materials testing or trialling activities, industry visits, technical reports
• oral report supported by notes and/or visual materials