SUBJECT SELECTION HANDBOOK

TYRRELL COLLEGE
Your opportunity to succeed

2026

TYRRELL COLLEGE
Your opportunity to succeed

OUR MOTTO

Your opportunity to succeed.

OUR PURPOSE

To provide a safe, positive and challenging environment where everyone aspires to aim high and become responsible, caring and contributing community members.

OUR VALUES

- *Respect*
- *Responsibility*
- *Honesty*
- *Aim High*

Our college aims to foster a caring college climate which encourages personal responsibility and self-discipline. It is the responsibility of the staff, students and parents to encourage these principles:

- Fairness and honesty
- Respect for the rights of others
- The development of self-discipline
- Encouragement of sharing, tolerance and compassion among students
- Respect for the dignity of others

We are committed to a series of programs (The Resilience Project and Resilience, Rights and Respectful Relationships) which provide developmental lessons aimed at fostering and reinforcing these principles in a positive way.

Appropriate language and manners should be used and will be encouraged at all times.

Bullying, whether it be physical, verbal or cyber, will not be tolerated at any level.

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INTRODUCTION

In 2026, our Senior School program will continue to operate in line with the statewide VCE/VCE VM updates. We are actively seeking ways to enhance our programs and provide students with a wider range of subjects and certifications.

Our selection of VCE and VET subjects may vary each year based on the availability of teaching staff. However, we strive to maintain a wide variety of subjects for students to choose from.

It is important for students to select their subjects based on personal preferences and their intended career pathway during the Senior years. While we do our best to accommodate all students' desired preferences, there may be instances where this is not possible.

The subject blocks will be created based on students' subject preferences and career goals. If there is a subject of interest that is not currently offered, we encourage students to reach out to the school to discuss potential options, as we are willing to create individual programs to meet their needs.

We encourage families to discuss with their students what their current aspirations are once they complete school. If unknown, please reassure your child that this is quite alright, and that their pathway simply needs to allow for as many options as possible so that opportunities are not restricted. When talking to your child, discuss what they enjoy, what they are good at and what types of jobs they would like to do in the future. Some may choose to review their Morrisby Career Report that highlights areas of strength and preferences.

Our teachers and careers advisors will work closely with students to provide advice about what Vocational Education and Training (VET) programs, prerequisites, subjects and ATARs would help to provide the most realistic and appropriate pathway for them.

The transition into the Senior years of schooling can be quite stressful for students and families and so we encourage you all to keep the lines of communication open and access your teachers and careers advisors as often as necessary. Clarity of information will assist staff in ensuring that all possible resources and supports are provided.

VTAC Guide for Choosing VCE Studies - YouTube

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YEAR 10 ADMINISTRATIVE GUIDELINES

Tyrrell College aims to offer a comprehensive education to all students. We provide a wide range of subjects that prepare students for the Victorian Certificate of Education (VCE), Vocational Education and Training (VET) certificates, the VCE Vocational Major (VM), and the Victorian Pathways Certificate (VPC).

The Year 10 program at Tyrrell College consists of six blocks of four lessons each. The structure of blocks for 2026 is outlined below:

Year long subjects (3 blocks)	**Semester long subjects (2 blocks)**	**Elective line (1 block)**
English	Art	VCE
Maths	Health	VET
Physical Education	History	Work Placement (SWL)**
VCE VM Work Related Skills*	Science	

All Year 10 students and their parents or guardians **must** attend a careers pathways meeting **before** submitting their program request for their Senior years.

Please note:

- *VCE VM Work Related Skills provides students who successfully complete the course with units towards their VCE VM. This course also involves the completion of a week-long work experience opportunity.
- **Structured Workplace Learning (SWL) – can contribute a maximum of two Units towards a Senior Certificate. It must be related to an industry specific VET that a student undertakes, and hours must be kept in a logbook.
- When choosing a VCE elective, please refer to the **2029** VTAC Prerequisite Guide for more information on the subjects you will need to complete for your chosen career pathway.

  Please see your careers advisor for more information about prerequisites or go to the VTAC website and view the 2029 prerequisite guide once available.

  You can also investigate the prerequisites required for specific courses using the Prerequisite Explorer link below.
  VTAC VCE Prerequisite Explorer - YouTube

Refer to the relevant sections of the subject selection booklet for more information on each elective subject.

VCE ADMINISTRATIVE GUIDELINES

ORGANISATIONAL STRUCTURE OF VCE

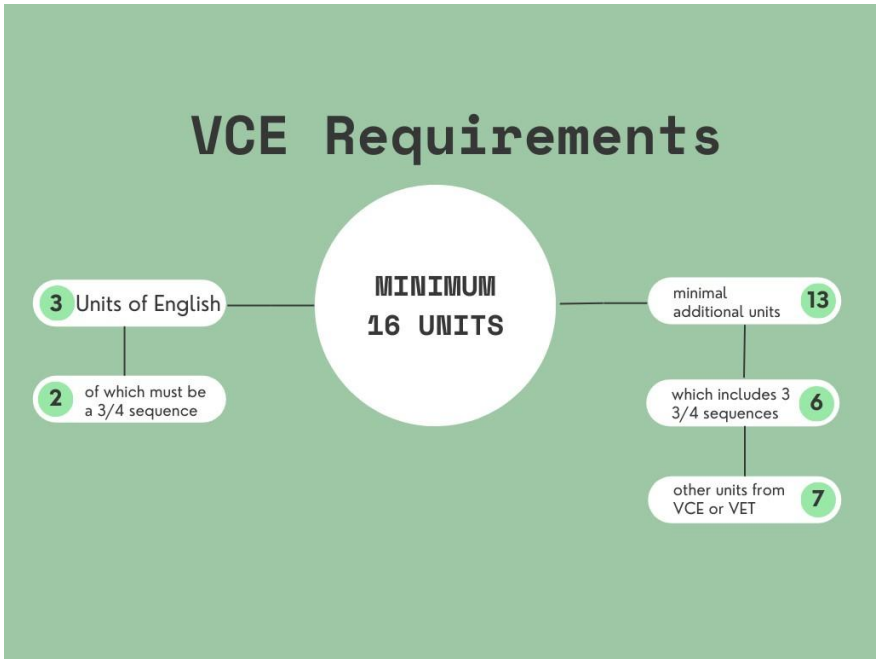
The Victorian Certificate of Education (VCE) involves two or more years of continual study and assessment. It ensures that every student has to meet the same assessment requirements: a combination of externally marked exams and school assessed coursework (SACs) and tasks (SATs).

VCE REQUIREMENTS

For students to satisfactorily complete their VCE, they must have a satisfactory result (S) for a minimum of 16 units. This must include:

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

Units 3 and 4 of all studies must be undertaken as a sequence in a single academic year; a student may not enrol in Unit 4 only. Students must undertake Unit 3 of a study before commencing Unit 4.



CHOOSING UNITS

After English, the remaining units are determined by each individual student. The choice of these units is made in consultation with parents, school leaders, the Careers Advisor and any other person from whom the student may wish to seek advice. Subjects will relate to students' interests, capacities and intended career paths. Don't choose units just because you believe they will give you an advantage in the VTAC scaling process or because your friends are doing them.

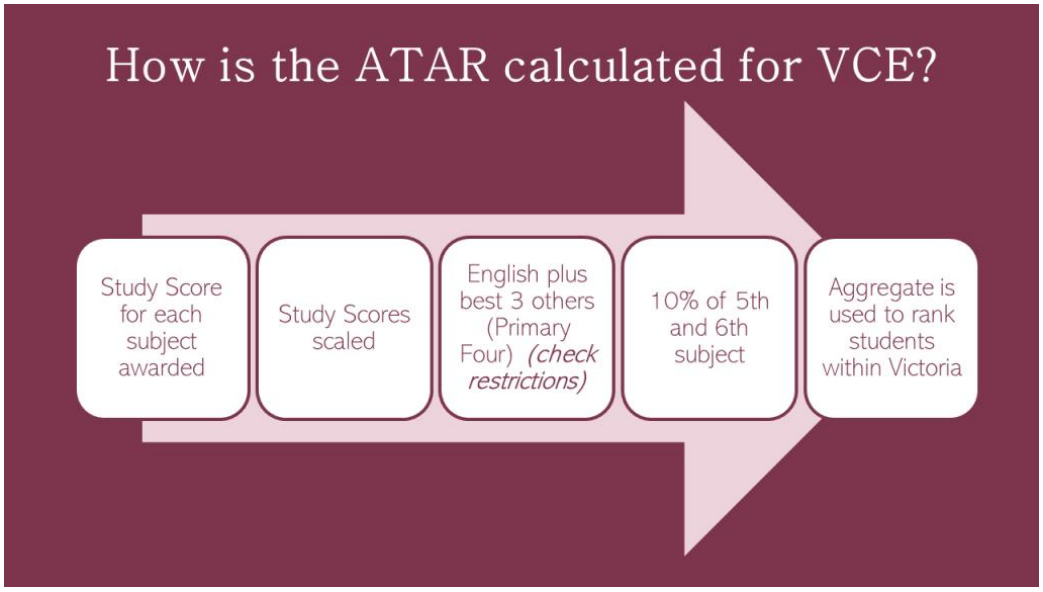
STUDY SCORE

Students will receive a study score out of 50 which sums up their total achievement in each study. This only applies to scored Units 3 and 4 studies.

THE ATAR

Students will be issued with an Australia wide ATAR (Australian Tertiary Admissions Rank) which will be derived from the VCE study scores. These scores are adjusted by a comparison process (scaling) which adjusts for the fact that it is more difficult to obtain a high VCE study score in some studies than others.

The ATAR is calculated by adding your study scores from English Units 3 and 4 to your next best three study scores. You can also include 10 percent of your fifth and sixth Units 3 and 4 study scores.



THE GAT

The VCAA (Victorian Curriculum and Assessment Authority) requires students to complete the General Achievement Test (GAT) as a means of confirming school assessment. All Year 11 and 12 students taking any VCE Units 3 and 4 sequence will be required to sit the GAT (including those undertaking VCE VM subjects).

The GAT is a general achievement test – it is not a test of knowledge about a particular subject or topic. The GAT is split into two sections:

- **Section A:** Assesses basic literacy and numeracy skills.
- **Section B:** Assesses skills in mathematics, science, technology, the arts and humanities, with an increased focus on critical and creative thinking skills.

The VCAA uses the results from the GAT to:

- Review school assessment of School-Assessed Tasks (SATs)
- Apply statistical moderation to School-Assessed Coursework (SACs)
- Check the accuracy of student scores in examinations
- Request authentication checks by schools for particular students' School-Assessed Tasks
- Calculate derived examination scores

LEARNING VIA DISTANCE EDUCATION

Learning via distance education allows students to participate in a class taught from a distance education provider or other school in our network. This option is available to our students when there is only a small number of students wishing to take the class or due to a lack of the required teacher expertise at the College. Please note that the College aims to deliver face to face teaching wherever possible and that Distance Ed becomes an option once face to face delivery is not possible. Whilst we try to allocate a teacher to supervise/check in with students completing studies via Distance Ed, this may not always be possible due to timetabling constraints of staff.

Learning via distance education places some extra demands on students. Students must be willing to learn independently, and they must work without direct supervision. Students need to honestly appraise their understanding and performance and actively seek help from their teacher when required.

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VCE VOCATIONAL MAJOR (VM) GUIDELINES

The VCE Vocational Major (VM) is a vocational program within the VCE designed to be completed over a minimum of two years. The VCE VM can be an atypical pathway to university as an add on to a scored VCE certificate or as a non-scored pathway into apprenticeships, traineeships, further education and training, or directly into the workforce.

To be eligible to receive the VCE VM, students must satisfactorily complete a **minimum** of 16 units, including:

- 3 VCE VM Literacy or VCE English units (including a Unit 3–4 sequence)
- 2 VCE VM Numeracy or VCE Mathematics units
- 2 VCE VM Work Related Skills (WRS) units
- 2 VCE VM Personal Development Skills (PDS) units, and
- 2 VET credits at Certificate II level or above (180 nominal hours)

Students must complete a **minimum of three other** Unit 3–4 sequences as part of their program. Units 3 and 4 of VCE VM studies may be undertaken together over the duration of the academic year to enable these to be integrated. Students can also include other VCE studies and/or VET programs and can receive Structured Workplace Learning (SWL) recognition. Most students will undertake between 16-20 units over the two years.

ASSESSMENT OF VCE VM SUBJECTS

The four subjects specific to the VCE VM (Literacy, Numeracy, PDS and WRS) are standards-based and have specific learning outcomes, all of which must be met to gain a satisfactory grade in each unit.

Unlike other VCE studies, there is no external assessment of VCE VM Unit 3–4 sequences, and VCE VM studies do not receive a study score and therefore **do not** contribute to the ATAR. If a student wishes to receive study scores, they can choose from the wide range of VCE studies and scored VCE VET programs that contain both internal and external assessment components.

For more information on the VCE Vocational Major please view the following website.

https://www.vcaa.vic.edu.au/curriculum/vce/Pages/AboutVCEVocationalMajor.aspx

VET ADMINISTRATIVE GUIDELINES

Vocational Education and Training (VET) programs are an excellent option for students who would like to gain practical skills and knowledge that will enable them to succeed in their chosen career path. These programs may be undertaken as part of the Victorian Certificate of Education (VCE) or VCE Vocational Major (VCE VM).

In some VET subjects, students are given extra credit towards their ATAR score through scored assessment or block credit, providing an incentive for students to pursue these courses. Additionally, students may be able to negotiate alternative VET programs with the VET coordinator, allowing for greater flexibility in their course selection.

It is worth noting that VET programs often involve a component of structured workplace learning, where students can gain valuable hands-on experience in a real-world environment.

This practical learning experience allows students to develop relevant skills and competencies, as well as build important industry contacts that may assist with future job applications. As such, VET programs offer a unique opportunity for students to gain practical skills, experience industry-specific training, and improve their employability prospects.

Assessment for VET is competency based (S/N). This assessment is carried out by the classroom teacher and/or the Registered Training Organisation (RTO).

Scored VCE VET studies

Scored VCE VET studies are VCE VET Unit 3-4 sequences with a scored assessment.

When calculating your aggregate, VCE VET Unit 3-4 sequences with a scored assessment are treated in the same way as other Units 3 and 4 VCE studies.

However, if you choose not to take the scored assessment for a study when it is available, the study cannot be used in the calculation of your aggregate.

Non-scored VCE VET studies

Non-scored VCE VET studies are VCE VET Unit 3-4 sequences with no scored assessment available (as distinct from those where assessment is available, but you choose not to take it).

Since there are no scores available for non-scored sequences, VTAC may include the sequence as an increment (the fifth and/or sixth study). The amount of an increment is determined by calculating 10 per cent of the fourth study score of your primary four.

Up to two non-scored VCE VET increments may contribute to your aggregate.

STRUCTURED WORKPLACE LEARNING

Structured Workplace Learning (SWL) provides students with an immersive and practical learning environment where they can learn and apply knowledge and skills that are directly relevant to the workplace. This hands-on experience allows students to try out different career choices and gain a better understanding of various industries before leaving school.

SWL also provides students with the opportunity to develop valuable contacts with potential employers and work alongside adult professionals in an adult environment, thereby gaining an appreciation of the real world of work.

SWL allows students to demonstrate mastery of specific skills and competencies related to their accredited VET-in-Schools programs, which is often a mandatory component of such courses.

SWL also contributes to the development of lifelong learning skills, as it is an excellent platform for students to undertake relevant curriculum and develop crucial employability skills, such as communication, teamwork, and problem-solving. Students can earn VCAA credits for their VCE/VCE VM certificate through the Structured Workplace Learning Recognition (SWLR) program, further enhancing their academic achievements and career prospects.

SCHOOL BASED APPRENTICESHIP

School based apprenticeships (SBATs) are an excellent option for students who wish to gain both academic qualifications and practical, industry-based experience while still completing their senior secondary certificate.

SBATs are available to students over the age of 15 years who are enrolled in either a VCE or VCE VM program. They involve a negotiated training program leading to a nationally recognised qualification in their chosen trade or profession.

In addition to their academic studies, students are expected to undertake paid work of an average of 10-15 hours per week, which is an integral part of the program. Through this work, students gain valuable industry experience and develop crucial employability skills.

Furthermore, students must also complete VET/TAFE type modules as part of their SBAT, which offers them practical, hands-on experience and industry-specific training in their chosen field of work.

SBATs typically take around two years to complete, with students balancing their academic studies, paid work, and vocational training to achieve their academic and professional goals. Overall, SBATs offer students a unique opportunity to gain both academic and practical experience, thereby improving their career prospects and employability.

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VET SUBJECTS OFFERED IN 2026

VET COURSE	NUMBER OF YEARS	UNITS	SCORED (S) OR NON-SCORED (NS)
VCE VET Certificate II in Agriculture	2	1-4	NS
VET Certificate II in Engineering Pathways	2	1-4	NS
VCE VET Certificate II in Community Services	1	1-2	NS
VCE VET Certificate III in Music - Sound Production	2	1-4	S/NS
VCE VET Certificate III in Sports, Aquatics and Recreation	2	1-4	S/NS

*****All VET and VCE VET are subject to staffing availability and student numbers***

OTHER VET SUBJECTS

If you are interested in completing an alternative VET subject, you are required to make an appointment with a Senior Leader and the Careers Advisor. We cannot guarantee that other VET subjects will be available from other providers/schools or that they will align with our timetable. We are, however, happy to investigate all options on your behalf.

More information can be found at:

https://www.vcaa.vic.edu.au/curriculum/vet/vce-vet-programs/Pages/Index.aspx

https://www.vcaa.vic.edu.au/studentguides/getvet/Pages/Index.aspx

VCE VET AGRICULTURE

AHC20122 – CERTIFICATE II IN AGRICULTURE

This qualification describes the skills and knowledge for general job roles in rural and regional Australia, and supporting job roles in agriculture, including livestock production, cropping or, in the case of mixed farming workplaces, both cropping and livestock.

LEARNING AREAS

- Participate in workplace health and safety processes
- Participate in environmentally sustainable work practices
- Work effectively in industry
- Participate in workplace communication
- and 12 elective units

CAREER PATHWAYS

- Farm Management
- Farm Operations
- Agricultural Sciences
- Landcare
- Environmental Sciences
- Agronomy
- Agricultural Biotechnology
- Wool Classing.

CREDIT IN THE VCE (including VCE VM and VPC)

Recognition of up to four VCE VET units at Units 1 and 2 level, and a VCE VET Unit 3–4 sequence.

Confirmed by VCAA.

https://www.vcaa.vic.edu.au/curriculum/vet/vce-vet-programs/vce-vet-agriculture-horticulture-conservation-and-ecosystem-management

VET ENGINEERING

MEM20422 CERTIFICATE II IN ENGINEERING PATHWAYS

This qualification is designed to develop trade-like skills and offers an introduction to essential engineering practices. Students explore the world of welding, machining, and utilising engineering tools and equipment to create and modify objects. With a focus on safe practices and simulated work environments, this qualification is ideal for those seeking exposure to the engineering industry. Students gain valuable knowledge and skills that enhance their employability in engineering or related workplaces.

LEARNING AREAS

- Work safely and effectively in manufacturing and engineering
- Develop a career plan for the engineering and manufacturing industries
- Undertake a basic engineering project
- Participate in environmentally sustainable work practices
- Organise and communicate information
- Interact with computing technology
- Use hand tools
- Use power tools/handheld operations
- Use engineering workshop machines
- Use electric welding machines
- Use fabrication equipment
- Work in a team

CAREER PATHWAYS

- Engineering
- Manufacturing
- Fitter and Turner
- Electrician
- Automotive

CREDIT IN THE VCE (including VCE VM and VPC)

Certificate II qualifications provide credit at VCE Units 1 and 2 level only. Each completed 90 nominal hours of training provides one VCE unit of credit. Credit accrues in the following sequence: Units 1, 2, 1 and 2 up to a maximum of six VCE units.

Confirmed by VCAA.
https://www.vcaa.vic.edu.au/assessment/results/credit-recognition/Pages/BlockCreditRecognition.aspx

VCE VET SPORTS, AQUATICS AND RECREATION

SIS30122 CERTIFICATE III IN SPORTS, AQUATICS AND RECREATION

Through the Certificate III in Sport, Aquatics and Recreation, students thoroughly develop the skills and knowledge to deliver sport and recreation services. Students who complete this program develop the ability to work independently in the industry, using their judgement to effectively complete work activities. Selected units in the Certificate III program cover various key areas within the industry, including recreation session delivery, coaching, technology, officiating, and working with diverse people. The skills and knowledge developed by completing these units provide students with a strong foundation for whichever direction they take in the industry.

Year 2 of this program offers students the opportunity to achieve a study score that contributes to the student's ATAR.

LEARNING AREAS

- Delivery of recreation sessions
- Workplace health and safety
- Conditioning for sport
- Officiating
- Technology in the sport, fitness and recreation industry
- Client service and working with diverse people
- First aid and responding to emergencies

**The RTO may make any necessary adjustments to the structure of this program.

CREDIT IN THE VCE (including VCE VM and VPC)

Certificate III qualifications provide credit at VCE units 1 to 4 level. Each completed 90 nominal hours of training provides one VCE unit of credit. Credit accrues in the following sequence: Units 1, 2, 3, 4, 3 and 4 up to a maximum of six VCE units.

Confirmed by VCAA.
https://www.vcaa.vic.edu.au/curriculum/vet/vce-vet-programs/vce-vet-sport-and-recreation

VCE VET COMMUNITY SERVICES

CHC22015 CERTIFICATE II IN COMMUNITY SERVICES

This certificate allows students to develop the skills and knowledge to undertake community services work such as providing support and assistance to a variety of clients including childcare, the elderly and the disability sector. This program is perfect for students looking to move into a range of areas in the community services sector and is the perfect building block for developing a sound educational base specific to the fastest growing sector in Australia.

LEARNING AREAS

- Working with diverse people
- Communication in the workplace
- Work health and safety
- Providing initial advice to clients
- Patients, or customers
- Teamwork

CAREER PATHWAYS

- Assistant Community Services Worker
- Assistant Childcare Worker
- Assistant Disability Worker
- Elderly Assistant
- Care Service Employee
- Customer Service Staff
- Social Work Roles
- Youth Services Roles

CREDIT IN THE VCE (including VCE VM and VPC)

Certificate II qualifications provide credit at VCE Units 1 and 2 level only. Each completed 90 nominal hours of training provides one VCE unit of credit. Credit accrues in the following sequence: Units 1, 2, 1 and 2 up to a maximum of six VCE units.

Confirmed by VCAA.
https://www.vcaa.vic.edu.au/assessment/results/credit-recognition/Pages/BlockCreditRecognition.aspx

https://www.vcaa.vic.edu.au/curriculum/vet/vce-vet-programs/vce-vet-community-services

VCE VET MUSIC - SOUND PRODUCTION

CUA30920 CERTIFICATE III IN MUSIC

The Certificate III in Music assists students in developing a wide range of competencies in varied work contexts of the music industry, as well as in environments that require skills in music performance, music creation or composition, sound production or music business. **Sound Production Specialisation:** provides students with the practical skills and knowledge to record, mix and edit sound sources. Units 1 and 2 of the program can include units such as implementing, repairing and maintaining audio equipment, performing basic sound editing and developing music industry knowledge.

LEARNING AREAS

- Work effectively with others
- Contribute to the health and safety of self
- Develop and apply creative arts industry knowledge
- Recording – editing sound
- Elective Units

CAREER PATHWAYS

- Studio Assistant
- Podcaster
- Sound editor
- Performer
- Session Musician
- Producer
- Stagehand, Songwriter, Broadcaster
- Sound and Lighting Technician

CREDIT IN THE VCE (including VCE VM and VPC)

For either of the **Performance** or **Sound Production** Unit 3-4 sequences in the VCE VET Music Industry program, students must undertake scored assessment for the purpose of achieving a study score. This study score can contribute directly to the ATAR, either as one of the student's best four studies (the primary four) or as a fifth or sixth study increment. Where a student elects not to receive a study score, no contribution to the ATAR will be available. Where an additional non-scored VCE VET Unit 3-4 sequence is undertaken, students may be eligible for a fifth or sixth study increment. Confirmed by VCAA.

https://www.vcaa.vic.edu.au/curriculum/vet/vce-vet-programs/Pages/musicindustry.aspx

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VCE ACCOUNTING

Overview:

Accounting is the process of collecting, recording, reporting, analysing and interpreting financial and non-financial data and accounting information, and using it to model, forecast and provide advice to stakeholders in a business. This informs decision-making within the business, with a view to improving business performance. Accounting therefore plays an integral role in the success and management of businesses.

Prerequisites:

Units 1 and 2: Year 10 Humanities (recommended)
Units 3 and 4: VCE Accounting Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**The role of accounting in business** This unit explores the establishment of a business and the role of accounting in the determination of business success or failure. It considers the importance of accounting information to stakeholders. Students analyse, interpret and evaluate the performance of the business using financial and non-financial information. They use these evaluations to make recommendations regarding the suitability of a business as an investment. Students record financial data and prepare reports for service businesses owned by sole proprietors.
UNIT 2	**Accounting and decision-making for a trading business** Students develop their knowledge of the accounting process for sole proprietors operating a trading business, with a focus on inventory, accounts receivable, accounts payable and non-current assets. Students use manual processes and ICT, including spreadsheets, to prepare historical and budgeted accounting reports. Students analyse and evaluate the performance of the business relating to inventory, accounts receivable, accounts payable and non-current assets. They use relevant financial and other information to predict, budget and compare the potential effects of alternative strategies on the performance of the business. Using these evaluations, students develop and suggest strategies to improve business performance.
UNIT 3	**Financial accounting for a trading business** This unit focuses on financial accounting for a trading business owned by a sole proprietor and highlights the role of accounting as an information system. Students use the double entry system of recording financial data and prepare reports using the accrual basis of accounting and the perpetual method of inventory recording. Students develop their understanding of the accounting processes for recording and reporting and consider the effect of decisions made on the performance of the business. They interpret reports and information presented in a variety of formats and suggest strategies to improve the performance of the business.
UNIT 4	**Recording, reporting, budgeting, and decision-making** Students further develop their understanding of accounting for a trading business owned by a sole proprietor and the role of accounting as an information system. They use the double entry system of recording financial data and prepare reports using the accrual basis of accounting and the perpetual method of inventory recording. Both manual methods and ICT are used to record and report. Students extend their understanding of the recording and reporting process with the inclusion of balance day adjustments and alternative depreciation methods. They investigate the role and importance of budgeting in decision-making and analyse and interpret accounting reports and graphical representations to evaluate the performance of a business. Using this evaluation, students suggest strategies to improve business performance.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 25% each to the study score.
Exam:	The examination will contribute 50% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce-curriculum/vce-study-designs/accounting/accounting	

VCE AGRICULTURAL AND HORTICULTURAL STUDIES

Overview:
Australia faces a rising population and increasing urgency to conserve resources and mitigate the effects of climate change. Sustainable management of food and fibre industries is vital for local, national and global markets. The broad, applied nature of VCE Agricultural and Horticultural Studies prepares students for further studies and careers in agriculture, horticulture, land management, agricultural business practice and natural resource management. This study complements the skills focus of the competency-based nationally recognised VCE VET Agriculture, Horticulture, Conservation and Land Management program.

Prerequisites:

Units 1 and 2: Year 10 Science (recommended)
Units 3 and 4: VCE Agricultural and Horticultural Studies Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**Change and opportunity** Students develop their understanding of Australia's agricultural and horticultural industries. They consider sources of food and fibre indigenous to Victoria prior to European settlement, and current and past perceptions of Australian agricultural and horticultural industries. Students explore contemporary career pathways and professional roles, with a focus on innovation and creative problem solving in the face of change and challenge. Students undertake practical tasks reflecting best-practice understandings.
UNIT 2	**Growing plants and animals** Students research plant and animal nutrition, growth and reproduction. They develop an understanding of the conditions in which plants and animals grow and reproduce, and of related issues and challenges. Students investigate the structure, function, nutrition, and growth of plants. They explore animal nutrition and digestion, and growth and development, and make comparisons between production methods. Students research reproductive processes and technologies for both plants and animals.
UNIT 3	**Securing the future** Students examine the role of research and data, innovation and technology in Australia's food and fibre industries. Students research Australia's past responses to such challenges, analysing responses leading to successful outcomes as well as those with unforeseen consequences. They investigate the protection of agricultural and horticultural industries against pests, diseases and weeds, and measures to combat the serious threat posed by biological resistances.
UNIT 4	**Sustainable food and fibre production** Students research the effects of climate change on food and fibre production through case studies of effective responses to this and other environmental challenges. They investigate environmental degradation and approaches to sustainable land management and rehabilitation. They study ecosystems, the importance of biodiversity and the applicability of environmental modification techniques. Within the context of agricultural and/or horticultural practices, sustainability is viewed as both a challenge and an opportunity, with students extending their thinking across the entire production chain from resource suppliers through to consumers. They research strategies for adding value to primary produce.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework Units 3 and 4 will contribute 30% each to the study score.
Exam:	The examination will contribute 40% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/agricultural-and-horticultural-studies/Pages/Index.aspx	

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VCE ART CREATIVE PRACTICE

Overview:

In the study of VCE Art Creative Practice, research and investigation inform art making. Through the study of artworks, the practices of artists and their role in society, students develop their individual art practice and communicate ideas and meaning using a range of materials, techniques and processes. In the practice of making and responding, students develop their skills in critical and creative thinking, innovation, problem-solving and risk-taking. By combining a focused study of artworks, art practice and practical art making, students recognise the interplay between research, art practice and the analysis and interpretation of art works.

Prerequisites:

Units 1 and 2: Year 10 Art (recommended)
Units 3 and 4: VCE Art Creative Practice Units 1 and 2 and/or VCE Visual Communication Design Units 1 and 2, and/or VCE Product Design and Technologies Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**Interpreting artworks and exploring the creative practice** Students use experimental and inquiry-based learning to explore ideas of personal interest using creative practice. Students use a range of materials, techniques, processes and art forms to create a body of experimental work in response to their research of artists and their personal observations of artworks.
UNIT 2	**Interpreting art works and developing the creative practice** Students investigate the artistic and collaborative practices of artists to make and present artworks using creative practice. They develop visual responses based on their investigations and explore the way historical and contemporary cultural contexts influence the artworks and the practices of artists, as well as their own art practice.
UNIT 3	**Investigation, ideas, artworks and the creative practice** Students use inquiry and project-based learning as starting points to develop a body of work known as the SAT. They explore ideas and experiment with materials, techniques and processes using creative practice. Students research historical and contemporary artists and investigate the issues that may arise from these artworks. Art practice commenced during Unit 3 is refined and resolved during Unit 4.
UNIT 4	**Interpreting, resolving and presenting artworks and the creative practice** Students continue to develop their work through research and exploration to support the development and refinement of their art. Throughout their research, students study the practices of selected artists to inform their own art practice. Students continue to build upon the ideas begun in Unit 3 and present a critique. They reflect on the feedback from their critique to further refine and resolve a body of work. Students present their body of work to an audience accompanied by documentation of their use of the creative practice.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	The School-assessed Task in Units 3 and 4 will contribute 60 % to the study score. School-assessed Coursework in Unit 4 will contribute 10 % to the study score.
Exam:	The examination will contribute 30 % to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/ArtCreativePractice/Pages/index.aspx	

** **Note:** Students who require specialist materials and equipment will be expected to provide these for their own use.

VCE AUSTRALIAN HISTORY

Overview:

In Units 3 and 4 Australian History, students develop their understanding of the foundational and transformative ideas, perspectives and events in Australia's history and the complexity of continuity and change in the nation's story. The study of Australian history is considered both within a national and a global context, particularly Aboriginal and Torres Strait Islander peoples and culture, a colonial settler society within the British Empire and as part of the Asia-Pacific region. Students come to understand that the history of Australia is contested and that the past continues to contribute to ongoing interpretations, debates and tensions in Australian society.

Prerequisites:

Units 3 and 4: Units 1 and 2 Modern History (recommended)

Course Outline	
UNIT 3	**From custodianship to the Anthropocene (60,000 BCE–1901)** Students investigate the historical role of humans in shaping the Australian landscape and ways in which the environment has influenced human activity. Aboriginal and Torres Strait Islander peoples managed and actively changed the land in response to the environmental features and conditions of the Australian continent. **From custodianship to the Anthropocene (1950–2010)** Students investigate the way in which Australian's perspectives of the environment changed and/or remained the same after 1950. They consider the changing nature and economic importance of rural and resource industries during this time.
UNIT 4	**War and upheaval (1909–1950)** Students investigate the debates and perspectives about Australia's participation in World War One and World War Two. **Transformations (1950-1992)** Students investigate Australia's involvement and reasons for participation in post-World War Two conflicts and the subsequent debates arising from these conflicts.
Assessment	
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 25% each to the study score.
Exam:	The examination will contribute 50% to the study score.
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/history/Pages/index.aspx	

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VCE BIOLOGY

Overview:

The study of Biology explores the diversity of life as it has evolved and changed over time and considers how living organisms function and interact. It explores the processes of life, from the molecular world of the cell to that of the whole organism and examines how life forms maintain and ensure their continuity. Students study contemporary research, models and theories to understand how knowledge in biology has developed and how this knowledge continues to change in response to new evidence and discoveries.

Prerequisites:

Units 1 and 2: Year 10 Science
Units 3 and 4: VCE Biology Units 1 and 2 Biology (recommended)

Course Outline	
UNIT 1	**How do organisms regulate their functions?** Students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, including the requirements for sustaining cellular processes. Students focus on cell growth, replacement and death and the role of stem cells in differentiation, specialisation and renewal of cells. They explore how systems function through cell specialisation in vascular plants and animals and consider the role homeostatic mechanisms play in maintaining an animal's internal environment.
UNIT 2	**How does inheritance impact on diversity?** Students explore reproduction and the transmission of biological information across generations and the impact this has on diversity. They investigate meiosis, factors that influence gene expression and explain the inheritance of traits through the interpretation of pedigree charts and outcomes of genetic crosses. Students analyse the advantages and disadvantages of asexual and sexual reproductive strategies, including cloning technologies. They study adaptations and explore interdependences between species, and how to maintain a population. Students consider the contributions of Aboriginal and Torres Strait Islander knowledge and perspectives in understanding the survival of organisms in Australian ecosystems.
UNIT 3	**How do cells maintain life?** Students investigate the workings of the cell from several perspectives. They explore the relationship between nucleic acids and proteins as key cellular molecules. They examine the biological consequences of manipulating the DNA molecule and applying biotechnologies. Students explore the structure, regulation and rate of biochemical pathways, with reference to photosynthesis and cellular respiration. They explore how the application of biotechnologies to biochemical pathways could lead to improvements in agricultural practices.
UNIT 4	**How does life change and respond to challenges?** Students consider the continual change and challenges to life on Earth. They study the human immune system and the interactions between its components to provide immunity to a specific pathogen and consider how the application of this knowledge can be used to respond to bioethical issues and challenges related to disease. Students consider how evolutionary biology is based on the accumulation of evidence over time. They investigate the impact of change events on gene pools and the biological consequences of changes in allele frequencies. Students examine the evidence for relatedness between species and examine the evidence for structural trends in the human fossil record. A student-led scientific investigation related to cellular processes and/or responses to challenges over time is undertaken in either Unit 3 or Unit 4, or across both Units, and is assessed in Unit 4, Outcome 3.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 20% and 30% respectively to the study score.
Exam:	The examination will contribute 50% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/biology/Pages/Index.aspx	

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VCE BUSINESS MANAGEMENT

Overview:

VCE Business Management examines the ways businesses manage resources to achieve objectives, following the process from the initial idea for a business concept, to planning and establishing a business, through to the day-to-day management of a business. It also considers changes that need to be made to ensure the continued success of a business. Students develop an understanding of the complexity of the challenges facing decision-makers in managing businesses and their resources.

Prerequisites:

Units 1 and 2: Year 10 Humanities (recommended)
Units 3 and 4: VCE Business Management Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**Planning a business** Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. The ability of entrepreneurs to establish a business and the fostering of conditions under which new business ideas can emerge are vital for a nation's wellbeing. Taking a business idea and planning how to make it a reality are the cornerstones of economic and social development. Students explore the factors affecting business ideas and the internal and external environments within which businesses operate, as well as the effect of these on planning a business. They also consider the importance of the business sector to the national economy and social wellbeing.
UNIT 2	**Establishing a business** This unit focuses on the establishment phase of a business. Establishing a business involves compliance with legal requirements as well as decisions about how best to establish a system of financial record keeping, staff the business and establish a customer base. Students examine the legal requirements that must be met to establish a business. They investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping. Students analyse management practices by applying key knowledge to contemporary business case studies from the past four years.
UNIT 3	**Managing a business** Students explore the key processes and considerations for managing a business efficiently and effectively to achieve business objectives. Students examine different types of businesses and their respective objectives and stakeholders. They investigate strategies to manage both staff and business operations to meet objectives and develop an understanding of the complexity and challenge of managing businesses. Students compare theoretical perspectives with current practice through the use of contemporary Australian and global business case studies from the past four years.
UNIT 4	**Transforming a business** Businesses are under constant pressure to adapt and change to meet their objectives. Students consider the importance of reviewing key performance indicators to determine current performance and the strategic management necessary to position a business for the future. Students study a theoretical model to undertake change and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance. They investigate the importance of effective management and leadership in change management. Using one or more contemporary business case studies from the past four years, students evaluate business practice against theory.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 25% each to the study score.
Exam:	The examination will contribute 50% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce-curriculum/vce-study-designs/business-management/vce-business-management	

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VCE CHEMISTRY

Overview:

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

Prerequisites:

Units 1 and 2: Year 10 Science
Units 3 and 4: VCE Chemistry Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**How can the diversity of materials be explained?** Students investigate the chemical structures and properties of a range of materials, including covalent compounds, metals, ionic compounds and polymers. They are introduced to ways that chemical quantities are measured.
UNIT 2	**How do chemical reactions shape the natural world?** Society is dependent on the work of chemists to analyse the materials and products in everyday use. Students analyse and compare different substances dissolved in water and the gases that may be produced in chemical reactions. They explore applications of acid-base and redox reactions in society. Students conduct practical investigations involving the specific heat capacity of water, acid-base and redox reactions, solubility, molar volume of a gas, volumetric analysis, and the use of a calibration curve.
UNIT 3	**How can design and innovation help to optimise chemical processes?** Students investigate the chemical production of energy and materials. They explore how innovation, design and sustainability principles and concepts can be applied to produce energy and materials while minimising possible harmful effects of production on human health and the environment. Students analyse and compare different fuels as energy sources for society, with reference to the energy transformations and chemical reactions involved, energy efficiencies, environmental impacts and potential applications.
UNIT 4	**How are carbon-based compounds designed for purpose?** Carbon is the basis not only of the structure of living tissues but is also found in fuels, foods, medicines, polymers and many other materials that we use in everyday life. Students investigate the structures and reactions of carbon-based organic compounds, including considering how green chemistry principles are applied in the production of synthetic organic compounds. They study the metabolism of food and the action of medicines in the body
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 20% and 30% respectively, to the study score.
Exam:	The examination will contribute 50% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/chemistry/Pages/Index.aspx	

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VCE ENGLISH

Overview:

The English language is central to the way in which students understand, critique and appreciate their world, and to the ways in which they participate socially, economically and culturally in our global society. The study of English encourages the development of literate individuals capable of critical and imaginative thinking, aesthetic appreciation and creativity. This study also develops students' ability to create and analyse texts moving from interpretation to reflection and critical analysis.

Prerequisites:

Units 1 and 2: Year 10 English
Units 3 and 4: Units 1 and/or 2 English (any)

Course Outline	
UNIT 1	Students engage in reading and viewing texts with a focus on personal connections with the story. They discuss and clarify the ideas and values presented by authors through their evocations of character, setting and plot, and through investigations of the point of view and/or the voice of the text. Students also read and engage imaginatively and critically with mentor texts that model effective writing. Through guided reading of mentor texts, students develop an understanding of the diverse ways that vocabulary, text structures, language features and ideas can interweave to craft compelling texts. They consider texts through knowledge of the ways purpose, context (incl. mode) and audience influence and shape writing.
UNIT 2	Students read or view a text, engaging with the ideas, concerns and tensions, and recognise ways vocabulary, text structures, language features and conventions of a text work together to create meaning. Through discussions about representations in a text, they examine ways readers understand text considering its historical context, and social and cultural values. They consider the way arguments are developed and delivered in forms of media. Students explore the structure of texts, including contention, sequence of arguments, use of supporting evidence and persuasive strategies. They closely examine the language and visuals employed by the author and offer analysis of the intended effect on the audience. Students apply their knowledge of argument to create a point of view text for oral presentation.
UNIT 3	Students apply reading and viewing strategies to critically engage with a text, considering its dynamics and complexities and reflecting on the motivations of its characters. They analyse the ways authors construct meaning through vocabulary, text structures, language features and conventions, and the presentation of ideas. They are provided with opportunities to understand and explore the historical context, and the social and cultural values of a text, and recognise how these elements influence the way a text is read or viewed, is understood by different audiences, and positions its readers in different ways. Students also work with mentor texts to inspire their own creative processes, to generate ideas for their writing, and as models for effective writing. They reflect on the deliberate choices they have made through their writing processes in their commentaries.
UNIT 4	Students further sharpen their skills of reading and viewing texts, developed in the corresponding area of study in Unit 3. Students consolidate their capacity to critically analyse texts and deepen their understanding of the ideas and values a text can convey. Students apply reading and viewing strategies to engage with a text and discuss and analyse the ways authors construct meaning in a text through the presentation of ideas, concerns and conflicts, and the use of vocabulary, text structures and language features. They recognise and explain the ways the historical context and social and cultural values can affect a reader and analyse how these values are presented. Students analyse the use of argument and language, and visuals in texts that debate a contemporary and significant national or international issue.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 25% each to the study score.
Exam:	The examination will contribute 50% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/english-and-eal/Pages/Index.aspx	

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VCE VM LITERACY

Overview:

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

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

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

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

To be eligible for a VCE VM Certificate, students MUST attain a satisfactory grade in at least three of the four units, including the Unit 3-4 sequence.

Prerequisites:

Units 1 and 2: Year 10 English
Units 3 and 4: VCE Vocational Major Literacy Units 1 and/or 2

Course Outline	
UNIT 1	Students develop their reading and viewing skills and expand their responses beyond Year 10 English and/or VPC Literacy. They read texts that serve a variety of purposes, from everyday content written to convey information, to texts written for specific workplaces or educational settings. They develop their capacity to critically assess digital texts, exploring texts through the prism of their own experience, knowledge, values and interests, and those of others. They engage in learning practices to deal safely and respectfully with others in the digital and virtual world.
UNIT 2	Students engage in issues that are characterised by disagreement or discussion, considering the values and beliefs that underpin different perspectives, and how these values create different biases or opinions. They practise their use of persuasive language and participate in discussion of issues, considering their own perspectives, and critically analysing the language, evidence and logic of the argument of others so that they can create their own response.
UNIT 3	Students become familiar with and develop confidence in understanding and accessing texts of an informational, organisational or procedural nature. They learn to recognise, analyse and evaluate the structures and semantic elements of these texts, and discuss and analyse their purpose and audience. They read and respond to a variety of technical content from a vocational, workplace or organisational setting of their choice, demonstrating understanding of how these texts inform and shape the organisations they interact with.
UNIT 4	Students investigate, analyse and create content for the advocacy of self, a product or a community group in a vocational or recreational setting. They research the differences between texts used for formal or traditional types of advocacy, as well as those being used increasingly in the digital domain for publicity or exposure. They use their knowledge and understanding of language, context and audience to complete an oral presentation that showcases their learning.
Assessment	
All assessments at Units 1 and 2 and Units 3 and 4 are school based. Procedures for assessment of levels of achievement in Units 1 to 4 are a matter for school decision. **NOTE: VCE Vocational Major Literacy cannot be completed as a scored VCE subject.**	
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/VCEVMLiteracy/Pages/Index.aspx	

VCE FOUNDATION MATHEMATICS

Overview:

VCE Foundation Mathematics Units 1-4 provide for the continuing mathematical development of students with respect to problems encountered in practical contexts in everyday life at home, in the community, at work and in study.

****NOTE: FOUNDATION MATHEMATICS MAY NOT COUNT AS "A MATHS" FOR SOME UNIVERSITY COURSES AT SOME UNIVERSITIES.**

Prerequisites:

Units 1 and 2: Year 10 General Mathematics (recommended)
Units 3 and 4: VCE Foundation Mathematics Units 1 and 2 (recommended)

Course Outline	
UNITS 1 & 2	Foundation Mathematics Units 1 and 2 focus on providing students with the mathematical knowledge, skills, understanding and dispositions to solve problems in real contexts for a range of workplace, personal, further learning, and community settings relevant to contemporary society. Students learn about: • earning and managing money • working with numbers, fractions, percentages and ratios • constructing and interpreting graphs including measures of centre and spread • measurement including length, area, volume and time The content is taught through contexts present in students' other studies, work and personal or other familiar situations.
UNITS 3 & 4	Foundation Mathematics Units 3 and 4 focus on providing students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning, community and global settings relevant to contemporary society. Areas of study include: • data analysis and statistics • financial and consumer arithmetic • space and measurement The content is taught through contexts present in students' other studies, work and personal or other familiar situations.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 40% and 20% respectively, to the study score.
Exam:	The examination will contribute 40% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/foundationmathematics/Pages/Index.aspx	

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VCE GENERAL MATHEMATICS

Overview:

VCE General Mathematics Units 1-4 provide for the study of non-calculus and discrete mathematics topics. They are designed to be widely accessible and provide preparation for general employment, business or further study, in particular where data analysis, recursion and financial modelling, networks and matrices are important.

Prerequisites:

Units 1 and 2: Year 10 General Mathematics
Units 3 and 4: VCE General Mathematics Units 1 and 2 and/or VCE Specialist Mathematics Units 1 and 2

****Mathematical Methods Units 1 and 2 is NOT suitable preparation for General Mathematics Units 3 and 4**

Course Outline	
UNIT 1	The areas of study for Unit 1 of General Mathematics are: • Investigating and comparing data distributions • Arithmetic and geometric sequences, first-order linear recurrence relations and financial mathematics • Linear functions, graphs, equations and models • Matrices Students also complete a mathematical investigation spanning one to two weeks.
UNIT 2	The areas of study for Unit 2 of General Mathematics are: • Investigating relationships between two numerical variables • Graphs and networks • Variation • Space, measurement and applications of trigonometry Students also complete a mathematical investigation spanning one to two weeks.
UNITS 3 & 4	General Mathematics Units 3 and 4 comprises: • Data analysis • Recursion and financial modelling • Matrices • Networks and decision mathematics
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 24% and 16% respectively, to the study score.
Exam:	The examinations will contribute 60% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/generalmathematics/Pages/Index.aspx	

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VCE MATHEMATICAL METHODS

Overview:

VCE Mathematical Methods Units 1–4 provide for the study of simple elementary functions, transformations and combinations of these functions, algebra, calculus, probability and statistics, and their applications in a variety of practical and theoretical contexts. They also provide background for further study in science, technology, engineering and mathematics (STEM), humanities, economics and medicine.

Prerequisites:

Units 1 and 2: Year 10 Advanced Mathematics
Units 3 and 4: VCE Mathematical Methods Units 1 and 2

Course Outline	
UNIT 1 & 2	Mathematical Methods Units 1 and 2 provide an introductory study of simple elementary functions of a single real variable, algebra, calculus, probability and statistics and their applications in a variety of practical and theoretical contexts. The focus of Unit 1 is the study of simple algebraic functions and the focus of Unit 2 is the study of simple transcendental functions, the calculus of polynomial functions and related modelling applications. The areas of study across both Units 1 and 2 are: • Functions, relations and graphs • Algebra, number and structure • Calculus • Data analysis, probability and statistics
UNIT 3 & 4	Mathematical Methods Units 3 and 4 extend the introductory study of simple elementary functions of a single real variable, to include combinations of these functions, algebra, calculus, probability and statistics, and their applications in a variety of practical and theoretical contexts. Units 3 and 4 consist of the areas of study: • Functions, relations and graphs • Algebra, number and structure • Calculus • Data analysis, probability and statistics
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 20% each to the study score.
Exam:	The examinations will contribute 60% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/mathematicalmethods/Pages/Index.aspx	

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VCE SPECIALIST MATHEMATICS

Overview:

Specialist Mathematics Units 1-4 is for students who are very good at maths. It is specifically designed for students interested in studying Engineering or Technology at university and is often a prerequisite. To study Specialist Mathematics, you must also study Mathematical Methods. Doing well in Methods and Specialist can significantly increase your ATAR.

Prerequisites:

Units 1 and 2: Year 10 Advanced Mathematics, Corequisite VCE Mathematical Methods Units 1 and 2
Units 3 and 4: VCE Mathematical Methods Units 1 and 2 and VCE Specialist Mathematics Units 1 and 2 Corequisite VCE Mathematical Methods Units 3 and 4

Course Outline	
UNIT 1 & 2	Specialist Mathematics Units 1 and 2 provide a course of study for students who wish to undertake an in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling, problem-solving, reasoning and proof. This study has a focus on interest in the discipline of mathematics and investigation of a broad range of applications, as well as development of a sound background for further studies in mathematics and mathematics related fields. The areas of study are: • Proof and number, Graph theory, Logic and algorithms • Sequences and series, combinatorics, matrices • Simulation, sampling and sampling distributions • Trigonometry, transformations, vectors in the plane • Complex numbers • Functions, relations and graphs
UNIT 3 & 4	Specialist Mathematics Units 3 and 4 highlight mathematical structure, reasoning and proof and applications across a range of modelling contexts. The areas of study are: • Logic and proof • Functions, relations and graphs • Complex numbers • Calculus • Vectors • Data analysis, probability and statistics
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 20% each to the study score.
Exam:	The examinations will contribute 60% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/specialistmathematics/Pages/Index.aspx	

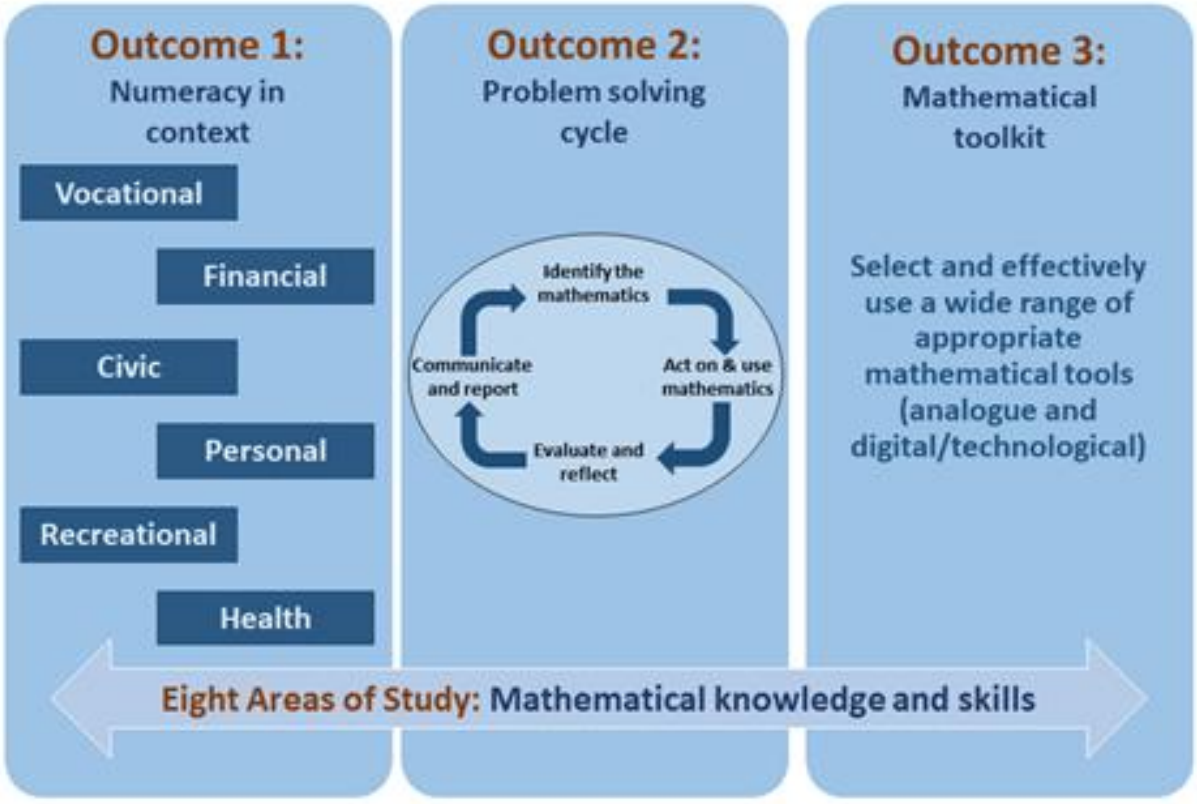
VCE VM NUMERACY

Overview:

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

The Numeracy study design is structured around four complementary and essential components: eight areas of study; six numeracy contexts; the problem-solving cycle; and the mathematical toolkit.

****Note:** VCE Foundation Mathematics also gives credit to the VCE VM certificate. Students choosing to do the VM certificate may complete a non-scored VCE Foundation Mathematics sequence in order to gain their two VM Numeracy credits. VCE Foundation Mathematics contains much of the same content as VM Numeracy and is also taught through vocational and real-life contexts.



This study is made up of four units. To be eligible for a VCE VM Certificate, students MUST attain a satisfactory grade in at least two of these units.

Prerequisites:

Units 1 and 2: Year 10 General Mathematics
Units 3 and 4: VCE Vocational Major Numeracy Units 1 and 2 (recommended)

Course Outline	
UNIT 1	There are four areas of study for Unit 1: ● Area of Study 1: Number ● Area of Study 2: Shape ● Area of Study 3: Quantity and measures ● Area of Study 4: Relationships
UNIT 2	There are four areas of study for Unit 2: ● Area of Study 5: Dimension and direction ● Area of Study 6: Data ● Area of Study 7: Uncertainty ● Area of Study 8: Systematics
UNIT 3	There are four areas of study in Unit 3: ● Area of Study 1: Number ● Area of Study 2: Shape ● Area of Study 3: Quantity and measures ● Area of Study 4: Relationships
UNIT 4	There are four areas of study for Unit 4: ● Area of Study 5: Dimension and direction ● Area of Study 6: Data ● Area of Study 7: Uncertainty ● Area of Study 8: Systematics
Assessment	
All assessments at Units 1 and 2 and Units 3 and 4 are school based. Procedures for assessment of levels of achievement in Units 1 to 4 are a matter for school decision. **NOTE: VCE Vocational Major Numeracy cannot be completed as a scored VCE subject.**	
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/VCEVMNumeracy/Pages/Index.aspx	

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VCE FOOD STUDIES

Overview:

VCE Food Studies is designed to build the capacities of students to make informed food choices and develop an understanding about food security, food sovereignty and food citizenship. Students develop their understanding of food while acquiring skills that enable them to take greater ownership of their food decisions and eating patterns. This study complements and supports further training and employment opportunities in the fields of home economics, food technology, food manufacturing and hospitality.

Prerequisites:

Units 1 and 2: No formal prerequisites. An interest in health and wellbeing across the lifespan, nutrition and medical technology.
Units 3 and 4: VCE Health and Human Development Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**Food Origins** Students focus on food from historical and cultural perspectives, and investigate the origins and roles of food through time and across the world. They look at Australian indigenous food prior to European settlement and how food patterns have changed since, particularly through the influence of food production, processing and manufacturing industries and immigration. Students investigate cuisines that are part of Australia's culinary identity today and reflect on the concept of an Australian cuisine. They consider the influence of innovations, technologies and globalisation on food patterns.
UNIT 2	**Food Makers** Students investigate food systems in contemporary Australia in both commercial food production industries and domestic and small-scale settings. They gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers. They use practical skills and knowledge to produce foods and consider a range of evaluation measures to compare their foods to commercial products. They also consider the effective provision and preparation of food in the home, and analyse the benefits and challenges of developing and using practical food skills in daily life.
UNIT 3	**Food in Daily Life** Students investigate the many roles and everyday influences of food, including the science of food, our physical need for it and how it nourishes and sometimes harms our bodies, and influences on food choices. Practical activities enable students to understand how to plan and prepare food to cater for various dietary needs through the production of everyday food that facilitates the establishment of nutritious and sustainable meal patterns.
UNIT 4	**Food Issues, Challenges and Futures** Students examine debates about Australia's food systems as part of the global food systems and describe key issues relating to the challenge of adequately feeding a rising world population. They focus on individual responses to food information and misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices, considering the relationship between food security, food sovereignty and food citizenship. Students focus on issues about the environment, climate, ecology, ethics, farming practices, including the use and management of water and land, the development and application of innovations and technologies, and the challenges of food security, food sovereignty, food safety and food wastage.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 30% each to the study score.
Exam:	The examination will contribute 40% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce-curriculum/vce-study-designs/food-studies/vce-food-studies	

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VCE HEALTH AND HUMAN DEVELOPMENT

Overview:

VCE Health and Human Development provides students with a broad understanding of health and wellbeing that reaches far beyond the individual and learn how important it is to themselves and to families, communities, nations and global society. Students explore the complex interplay of biological, sociocultural and environmental factors that support and improve health and wellbeing, or compromise it. Health literacy is developed as they connect their learning to their lives, communities and the world.

Prerequisites:

Units 1 and 2: No formal prerequisites. An interest in health and wellbeing across the lifespan, nutrition and medical technology.
Units 3 and 4: VCE Health and Human Development Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**Understanding health and wellbeing** Students explore health and wellbeing as a concept with varied and evolving perspectives and definitions. Students investigate the World Health Organization's (WHO) definition and other interpretations and explore the fundamental conditions required for health as stated by the WHO, which provide a social justice lens for exploring health inequities. Students identify perspectives relating to health and wellbeing, and inquire into factors that influence health attitudes, beliefs and practices, including among Aboriginal and Torres Strait Islander peoples. With a focus on youth, they consider their own health as individuals and a cohort.
UNIT 2	**Managing health and development** Students investigate transitions in health and wellbeing, and human development, from lifespan and societal perspectives. They explore the changes and expectations that are integral to the progression from youth to adulthood. They apply health literacy skills through an examination of adulthood as a time of increasing independence and responsibility, involving the establishment of long-term relationships, possible considerations of parenthood and management of health-related milestones and changes.
UNIT 3	**Australia's health in a globalised world** Students look at health and wellbeing, disease and illness as being multidimensional, dynamic and subject to different interpretations and contexts. They explore health and wellbeing as a global concept and take a broader approach to inquiry. Students consider the benefits of optimal health and wellbeing and its importance as an individual and a collective resource. They extend this to health as a universal right, analysing and evaluating variations in the health status of Australians.
UNIT 4	**Health and human development in a global context** Students examine health and human development in a global context. They use data to investigate health status and human development in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. Students build their understanding of health in a global context through examining changes in health status over time and studying the key concept of sustainability. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade, tourism, conflict and the mass movement of people.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 25% each to the study score.
Exam:	The examination will contribute 50% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce-curriculum/vce-study-designs/health-and-human-development/health-and-human-development	

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VCE LEGAL STUDIES

Overview:

VCE Legal Studies examines the institutions and principles that are essential to the Australian legal system. Students develop an understanding of the rule of law, law-makers, legal institutions, the relationship between the people and the Australian Constitution, the protection of rights in Australia, and the Victorian justice system. Students develop an appreciation of the ability of people to actively seek to influence changes in the law and analyse both the extent to which our legal institutions and the Victorian justice system are effective in achieving the principles of justice: fairness, equality and access.

Prerequisites:

Units 1 and 2: Year 10 Humanities (recommended)
Units 3 and 4: VCE Legal Studies Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**The presumption of innocence** Laws, including criminal law, aim to achieve social cohesion and protect the rights of individuals. Criminal law is aimed at maintaining social order. Students develop an understanding of legal foundations, such as the different types and sources of law, the characteristics of an effective law, and an overview of parliament and the courts. They develop an appreciation of how legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused, how a criminal case is determined, and the types and purposes of sanctions.
UNIT 2	**Wrongs and rights** Civil law aims to protect the rights of individuals. When rights are infringed, a dispute may arise requiring resolution, and remedies may be awarded. Students investigate key concepts of civil law and apply these to various scenarios to determine whether a party is liable. They explore different areas of civil law, and the methods and institutions that may be used to resolve a civil dispute and provide remedies. They develop an understanding of how human rights are protected in Australia, possible reforms to the protection of rights, and investigate an Australian contemporary human rights issue.
UNIT 3	**Rights and justice** The Victorian justice system aims to protect the rights of individuals and uphold the principles of justice: fairness, equality and access. Students examine the methods and institutions in the criminal and civil justice system, including the Magistrates' Court, County Court and Supreme Court, as well as other means and institutions used to determine and resolve cases. They explore the rights available to an accused and to victims in the criminal justice system, the roles of the judge, jury, legal practitioners and the parties, and the ability of sanctions and remedies to achieve their purposes.
UNIT 4	**The people, the law and reform** Students explore how the Australian Constitution establishes the law-making powers of the Commonwealth and state parliaments and protects the Australian people through structures that act as a check on parliament in law-making, and the significance of the High Court in protecting and interpreting the Australian Constitution. They investigate parliament and the courts, and the relationship between the two in law-making, and consider the roles of the individual, the media and law reform bodies in influencing changes to the law, and past and future constitutional reform.

Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 25% each to the study score.
Exam:	The examination will contribute 50% to the study score.

Study Design
https://www.vcaa.vic.edu.au/curriculum/vce-curriculum/vce-study-designs/legal-studies/legal-studies

VCE MODERN HISTORY

Overview:

History is a dynamic discipline that involves structured inquiry into the human actions, forces and conditions (social, political, economic, cultural, environmental and technological) that have shaped the past and present. To make meaning of the past, historians use historical sources, which include primary sources and historical interpretations. Historians analyse and evaluate evidence and use this when constructing historical arguments. As historians ask new questions, revise interpretations, or discover new sources, fresh understandings about the past come to light.

Prerequisites:

Units 1 and 2: Year 10 Humanities (recommended)

Course Outline	
UNIT 1	**Change and Conflict** In this unit students investigate the nature of social, political, economic and cultural change in the later part of the 19th century and the first half of the 20th century. Modern History provides students with an opportunity to explore the significant events, ideas, individuals and movements that shaped the social, political, economic and technological conditions and developments that have defined the modern world.
UNIT 2	**The Changing World Order** In this unit students investigate the nature and impact of the Cold War and challenges and changes to social, political and economic structures and systems of power in the second half of the 20th century and the first decade of the 21st century.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/history/Pages/index.aspx	

VCE PHYSICAL EDUCATION

Overview:

VCE Physical Education explores the complex interrelationships between biophysical (anatomical, biomechanical, physiological and skill acquisition) and psychosocial (psychological and sociocultural) principles to understand their role in producing and refining movement for participation and performance in physical activity, sport and exercise.

Prerequisites:

Units 1 and 2: Year 10 Health and PE (recommended)
Units 3 and 4: VCE Physical Education Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**The human body in motion** In this area of study, students examine the muscular and skeletal systems of the human body and how the muscles and bones work together to produce movement. Through practical activities, they explore, from a biophysical perspective, the major components of the musculoskeletal system and its contributions and interactions during physical activity, sport and exercise.
UNIT 2	**Physical activity, sport, exercise and society** This unit develops students' understanding of physical activity, sport and exercise from a participatory perspective. Students are introduced to types of physical activity and the role that physical activity participation and sedentary behaviour plays in their own health and wellbeing, as well as in other population groups and contexts.
UNIT 3	**Movement skills and energy for physical activity, sport and exercise** This unit introduces students to principles used to analyse human movement from a biophysical perspective. Students use a variety of tools and coaching techniques to analyse movement skills and apply biomechanical and skill-acquisition principles to improve and refine movement in physical activity, sport and exercise. They use practical activities to demonstrate how correctly applying these principles can lead to improved performance outcomes.
UNIT 4	**Training to improve performance** In this unit, students' participation and involvement in physical activity will form the foundations of understanding how to improve performance from a physiological perspective. Students analyse movement skills and fitness requirements and apply relevant training principles and methods to improve performance at various levels (individual, club and elite).
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 25% each to the study score.
Exam:	The examination will contribute 50% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/physicaleducation/Pages/Index.aspx	

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VCE PHYSICS

Overview:

The study of VCE Physics involves investigating, understanding and explaining the behaviour of physical phenomena in the Universe. Models, including mathematical models, are used to explore, simplify and predict how physical systems behave at varying scales from the very small (quantum and particle physics) through to the very large (astronomy and cosmology). Beginning with classical ideas and considering their limitations, and then being introduced to more modern explanations of the world, Physics provides a novel lens through which students experience the world around them, drawing on their natural curiosity and wonder.

Prerequisites:

Units 1 and 2: Year 10 Science
Units 3 and 4: VCE Physics Units 1 and 2

Course Outline	
UNIT 1	**How is energy useful to society?** Students examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain energy. Models used to understand light, thermal energy, radioactivity, nuclear processes and electricity are explored. Students apply these physics ideas to contemporary societal issues: communication, climate change and global warming, medical treatment, electrical home safety and Australian energy needs.
UNIT 2	**How does Physics help us to understand the world?** Students explore the power of experiments in developing models and theories. They investigate a variety of phenomena by making their own observations and generating questions, which lead to experiments. Students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary and apply these concepts to a chosen case study of motion. Students then choose one of 18 options to study. Students undertake their own student-adapted/designed scientific investigation.
UNIT 3	**How do fields explain motion and electricity?** Students use Newton's laws to investigate motion in one and two dimensions. They explore the concept of the field as a model used by physicists to explain observations of motion of objects not in apparent contact. Students compare and contrast three fundamental fields – gravitational, magnetic and electric – and how they relate to one another. They consider the importance of the field to the motion of particles within the field. Students examine the production of electricity and its delivery to homes. They explore fields in relation to the transmission of electricity over large distances and in the design and operation of particle accelerators.
UNIT 4	**How have creative ideas and investigation revolutionised thinking in physics?** Students explore some monumental changes in thinking in Physics that have changed the course of how physicists understand and investigate the Universe. They examine the limitations of the wave model in describing light behaviour and use a particle model to better explain some observations of light. Matter, that was once explained using a particle model, is re-imagined using a wave model. Students are challenged to think beyond how they experience the physical world of their everyday lives to thinking from a new perspective, as they imagine the relativistic world of length contraction and time dilation when motion approaches the speed of light. They are invited to wonder about how Einstein's revolutionary thinking allowed the development of modern-day devices such as the GPS. A student-designed practical investigation, involving the generation of primary data and including one continuous, independent variable related to fields, motion or light, is undertaken either in Unit 3 or Unit 4.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 30% and 20% respectively, to the study score.
Exam:	The examination will contribute 50% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/physics/Pages/Index.aspx	

VCE PRODUCT DESIGN AND TECHNOLOGIES

Overview:

VCE Product Design and Technologies offers students a unique focus on creativity through the development and production of innovative and ethical products. Through the study of VCE Product Design and Technologies, students become solution-focused and equipped to deal with both the interdisciplinary (interrelationship of multiple disciplines) and transdisciplinary (when disciplines interconnect to form new ideas) natures of design.

Prerequisites:

Units 1 and 2: Year 10 Design and Technologies (recommended)
Units 3 and 4: VCE Product and Design and Technologies Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**Design practices** This unit focuses on the work of designers across relevant specialisations in product design. Students explore how designers collaborate and work in teams; they consider the processes that designers use to conduct research and the techniques they employ to generate ideas and design products In this unit, students analyse and evaluate existing products and current technological innovations in product design. In their practical work, students explore and test materials, tools and processes available to them in order to work technologically, and they practise safe skill development when creating an innovative product.
UNIT 2	**Positive impacts for end users** Students explore cultural influences on design. They develop an awareness of how Aboriginal and Torres Strait Islander peoples design and produce products, how sustainable design practices care for Country, and how traditions and culture are acknowledged in contemporary designs. Students also have opportunities to make connections to personal or other cultural heritages.
UNIT 3	**Ethical product design and development** Students research a real personal, local or global need or opportunity with explicit links to ethical considerations. They conduct research to generate product concepts and a final proof of concept for a product solution that addresses the need(s) or opportunities of the end user(s).
UNIT 4	**Production and evaluation of ethical designs** Students continue to work as designers throughout the production process. They observe safe work practices in their chosen design specialisations by refining their production skills using a range of materials, tools and processes.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework (SACs) in Units 3 and 4 will contribute 20%, to the study score. The School Assessed Task (SAT) will contribute 50% to the study score.
Exam:	The examination will contribute 30% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/productdesign-and-technology/Pages/Index.aspx	

Note: Students who require specialist materials and equipment will be expected to provide these for their own use.

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VCE PSYCHOLOGY

Overview:

Psychology is a multifaceted discipline that seeks to describe, explain, understand and predict human behaviour and mental processes. It includes many sub-fields of study that explore and seek to better understand how individuals, groups, communities and societies think, feel and act.

Prerequisites:

Units 1 and 2: Year 10 Science (recommended)
Units 3 and 4: VCE Psychology Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**How are behaviour and mental processes shaped?** Students examine the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary knowledge from Western and non-Western societies, including Aboriginal and Torres Strait Islander peoples, has made to an understanding of psychological development and theories used to predict and explain the development of thoughts, emotions and behaviours. They investigate the human brain, the role it plays in mental processes and behaviour and explore plasticity and the influence brain damage may have on psychological functioning.
UNIT 2	**How do internal and external factors influence behaviour and mental processes?** Students evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. They explore a variety of factors and contexts that can influence the behaviour of individuals and groups, recognising that different cultural groups have different experiences and values. Students examine the contribution that classical and contemporary research has made to the understandings of human perception and why individuals and groups behave in specific ways, and investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted.
UNIT 3	**How does experience affect behaviour and mental processes?** Students investigate the contribution that classical and contemporary research has made to the understanding of the functioning of the nervous system and of biological, psychological and social factors that influence learning and memory. They investigate how the nervous system enables a person to interact with the world around them. They explore how stress may affect psychological functioning and consider stress as a psychobiological process, including emerging research into the relationship between the gut and the brain. Students investigate how mechanisms of learning and memory lead to the acquisition of knowledge and the development of new and changed behaviours. They consider models to explain learning and memory and the interconnectedness of brain regions involved in memory.
UNIT 4	**How is mental wellbeing supported and maintained?** Students explore the demand for sleep and the influences of sleep on mental wellbeing. They consider the biological mechanisms that regulate sleep and the relationship between rapid and non-rapid eye movement sleep over a life span. They study the impact that changes to sleep-wake cycles and sleep hygiene have and consider the contribution that classical and contemporary research has made to understanding sleep. Students consider ways mental wellbeing may be defined and conceptualised, including social and emotional wellbeing as a multidimensional and holistic framework to wellbeing. They explore mental wellbeing as a continuum and apply a biopsychosocial approach to understand phobia. They explore how mental wellbeing can be supported by considering the importance of protective factors and cultural determinants as integral to the wellbeing of Aboriginal and Torres Strait Islander peoples.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 20% and 30% respectively to the study score.
Exam:	The examination will contribute 50% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/psychology/Pages/Index.aspx	

VCE SYSTEMS ENGINEERING

Overview:

VCE Systems Engineering involves the design, production, operation, evaluation and iteration of integrated systems, which mediate and control many aspects of human experience such as mechanical systems, software controlled microcontrollers and electronics. Studying this subject will build your skills in software development, the implementation of the IoT (Internet of Things) and constructing practical electronic components.

Prerequisites:

Units 1 and 2: Yr 10 Science
Units 3 and 4: VCE Systems Engineering Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**Mechanical Systems** Students learn about fundamental mechanical engineering principles and the components required when producing an operational system. They learn fundamental principles of how mechanisms and simple mechanical systems provide movement and mechanical advantage, and how the specific components of a system or an entire mechanical system can be represented diagrammatically. This area of study also provides students with the opportunity to produce, test and evaluate an operational mechanical system.
UNIT 2	**Electrotechnological systems** Students focus on electrotechnological engineering principles and the components and materials that make operational electrotechnological systems. They develop their understanding of commonly used components, including their typical performance, physical appearance, implementation and how they should be represented in schematic circuit diagrams and in circuit simulation software.
UNIT 3	**Integrated and controlled systems** This unit focuses on engineering knowledge associated with the integration, calibration and control of mechanical and electrotechnological systems, how they work and can be adjusted, as well as how their performance can be calculated and represented diagrammatically in a range of forms. Students use fundamental physics and applied mathematics to solve systems engineering problems.
UNIT 4	**Systems control** On completion of this unit, students should be able to finalise production, test and diagnose a mechanical and electrotechnological integrated and controlled system using the systems engineering process, and manage, document and evaluate the system and the process, as well as their use of it. They should also be able to evaluate a range of new or emerging systems engineering technologies and analyse the likely impacts of a selected technology.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Units 3 and 4 will contribute 10% and 60% respectively to the study score.
Exam:	The examination will contribute 30% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/systemsengineering/Pages/Index.aspx	

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VCE VISUAL COMMUNICATION DESIGN

Overview:

Visual Communication Design is a study of visual language and the role it plays in communicating ideas, solving problems and influencing behaviours. Students learn to manipulate type and imagery when designing for specific contexts, purposes and audiences. They choose and combine manual and digital methods, media and materials with design elements and principles. In doing so, they learn how aesthetic considerations contribute to effective communication and resolution of design ideas, and how designers visually communicate concepts when developing messages, objects, environments and interactive experiences.

Prerequisites:

Units 1 and 2: Year 10 Art (recommended)
Units 3 and 4: VCE Creative Art Practice Units 1 and 2, and/or VCE Visual Communication Design Units 1 and 2, and/or Product Design and Technologies Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**Introduction to Visual Communication Design** In this unit, students are introduced to the practices and processes used by designers to identify, reframe and resolve design problems. Practical projects in Unit 1 focus on the design of messages and objects with students using the design process to create their own works. Students apply a range of methods, media and materials to develop their projects focusing on brand strategy and product development.
UNIT 2	**Design contexts and connections** Unit 2 builds on the understanding of practices developed in Unit 1. Students develop their knowledge of good design, different research methods and understanding of design factors as they explore the design process. Practical tasks focus on the design of environments and interactive experiences. Students adopt the practices of design specialists working in fields such as architecture, landscape and interior design while discovering the role of the interactive designer in the realm of user-experience.
UNIT 3	**Visual communication in design practice** Students explore and experience the ways in which designers work, while also analysing the work that they design. This exposure to designers' work provides the foundation for students' own investigation of the VCD design process. Students research a selected design problem and create a brief for a real or fictional client, identifying two distinct design needs. They generate, test and evaluate design ideas and share these with others. These design ideas are then further developed in Unit 4.
UNIT 4	**Delivering design solutions** Students continue to explore the design process, resolving design concepts and solutions for two final presentations. Ideas developed in Unit 3 are evaluated, selected, refined and shared with others for further review. Students choose how to best present design solutions, considering the aesthetic impact and communication of their ideas. They select materials, methods and media appropriate for the presentations of their final designs and address the design criteria specified in the brief.
Assessment	
Units 1 and 2:	All assessments at Units 1 and 2 are school based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.
Units 3 and 4:	School-assessed Coursework in Unit 3 will contribute 20 % to the study score. School-assessed Task in Units 3 and 4 will contribute 50% to the study score.
Exam:	The examination will contribute 30% to the study score.
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/visualcommunicationdesign/Pages/Index.aspx	

** **Note**: Students who require specialist materials and equipment will be expected to provide these for their own use.

VCE VM PERSONAL DEVELOPMENT SKILLS (PDS)

Overview:

VCE Vocational Major Personal Development Skills (PDS) takes an active approach to personal development, self-realisation and citizenship by exploring interrelationships between individuals and communities. PDS focuses on health, wellbeing, community engagement and social sciences, and provides a framework through which students seek to understand and optimise their potential as individuals and as members of their community. Through self-reflection, independent research, critical and creative thinking, and collaborative action, students will extend their capacity to understand and connect with the world they live in, and build their potential to be resilient, capable citizens.

This study is made up of four units. To be eligible for a VCE VM Certificate, students MUST attain a satisfactory grade in at least two of these units.

Prerequisites:

Units 3 and 4: VCE Vocational Major Personal Development Skills Units 1 and 2

Course Outline	
UNIT 1	**Healthy individuals** This unit focuses on the development of personal identity and individual pathways to optimal health and wellbeing, beginning with concepts of personal identity and factors that contribute to an individual's perception of self and individual health and wellbeing. Students use these findings to enhance an understanding of community cohesion, community engagement and how sense of identity may affect outcomes in different contexts. They investigate the elements of emotional intelligence and begin to develop an awareness of interrelationships between communities and the health and wellbeing of individuals. They investigate local health-promoting organisations and resources and play an active, role in designing and implementing activities or mechanisms to improve health and wellbeing.
UNIT 2	**Connecting with community** This unit focuses on the benefits of community participation and how people can work together effectively to achieve a shared goal. Students look at the relationships between active citizenship, empathy and connection to culture, and individual health and wellbeing. They investigate the barriers and enablers to problem solving within the community. They seek to understand different perspectives on issues affecting a community and reflect on relationships between community issues, social cohesion, and health and wellbeing, and the importance of clear information and communication. They plan, implement and evaluate an active response to an individual's need for community support.
UNIT 3	**Leadership and teamwork** This unit considers the role of interpersonal skills and social awareness in different settings and contexts. Students examine leadership qualities and the characteristics of effective leaders and how these qualities can be applied to the achievement of goals within personal and community contexts. They explore key components of effective teamwork and reflect on how to lead and contribute within a team context through a collaborative problem-solving activity. Students evaluate individual contribution as well as the overall effectiveness of the team.
UNIT 4	**Community project** This unit focuses on student participation in an extended project relating to a community issue. Students identify environmental, cultural, economic and social issues affecting the community and select one for an extended community project. They engage in a process of planning, implementing and evaluating a response to this issue and present a project to an appropriate audience of peers or community members.
Assessment	
All assessments at Units 1 and 2 and Units 3 and 4 are school based. Procedures for assessment of levels of achievement in Units 1 to 4 are a matter for school decision. **NOTE: VCE Vocational Major Personal Development Skills cannot be completed as a scored VCE subject.**	
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/VCEVMPersonalDevelopmentSkills/Pages/Index.aspx	

VCE VM WORK RELATED SKILLS (WRS)

Overview:

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

This study is made up of four units. To be eligible for a VCE VM Certificate, students MUST attain a satisfactory grade in at least two of these units.

Prerequisites:

Units 3 and 4: VCE Vocational Major Work Related Skills Units 1 and 2 (recommended)

Course Outline	
UNIT 1	**Careers and learning for the future** This unit recognises the importance of sourcing reliable information relating to future education and employment prospects to engage in effective pathway planning and decision-making. Students investigate information relating to future employment, including entry-level pathways, emerging industries, and growth industries and trends, and evaluate the impact of pursuing employment in different industries. Students reflect on this research in the context of their individual skills, capabilities and education and/or employment goals. They develop and apply strategies to communicate their findings.
UNIT 2	**Workplace skills and capabilities** As the nature of work changes over time, so do the skills and capabilities needed for success. Fundamental to achieving personal goals relating to future education and employment is the ability to recognise and develop individual skills and capabilities that are valued in a chosen pathway. Students consider the distinction between essential employability skills, specialist and technical work skills and personal capabilities, and understand the importance of training and development to support the attainment and transferability of skills. Students collect evidence and artefacts relating to their personal skills and capabilities and promote them through resumes, cover letters and interview preparation.
UNIT 3	**Industrial relations, workplace environment and practice** This unit focuses on the core elements of a healthy, collaborative, inclusive and harmonious workplace. Students learn how to maintain positive working relationships with colleagues and employers, understanding the characteristics of a positive workplace culture and its relationship to business success. They investigate key areas relating to workplace relations including methods for determining pay and conditions, workplace bullying, workplace discrimination, workplace harassment and dispute resolution. Students will discover how teamwork and communication skills contribute to healthy, collegiate and productive workplaces
UNIT 4	**Portfolio preparation and presentation** Portfolios are a practical and tangible way for a person to communicate relevant skills, experiences and capabilities to education providers and future employers. Students develop and apply their knowledge and skills relating to portfolios, including the features and characteristics of a high-quality physical and/or digital portfolio. The unit culminates in the formal presentation of a completed portfolio in a panel style interview and an evaluation of the end product.
Assessment	
All assessments at Units 1 and 2 and Units 3 and 4 are school based. Procedures for assessment of levels of achievement in Units 1 to 4 are a matter for school decision. **NOTE: VCE Vocational Major Work Related Skills cannot be completed as a scored VCE subject.**	
Study Design	
https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/VCEVMWorkRelatedSkills/Pages/Index.aspx	

VICTORIAN PATHWAYS CERTIFICATE (VPC) GUIDELINES

Entry into the VPC course is via interview only.

The Victorian Pathways Certificate (VPC) is an inclusive Year 11 and 12 standards-based certificate that meets the needs of a smaller number of students who are not able or ready to complete the VCE (including the VCE Vocational Major). It provides an enriched curriculum and excellent support for students to develop the skills, capabilities and qualities for success in personal and civic life. While the VPC is not a senior secondary qualification, it can be a pathway to the VCE.

The VPC is designed to develop and extend pathways for young people, while providing flexibility for different cohorts. The VPC is suitable for students whose previous schooling experience may have been disrupted for a variety of reasons, including students with additional needs, students who have missed significant periods of learning and vulnerable students at risk of disengaging from their education. Students will gain the skills, knowledge, values and capabilities to make informed choices about pathways into a senior secondary qualification, entry level Vocational Education and Training (VET) course or employment.

To be eligible to receive the VPC, students must satisfactorily complete a minimum of 12 units, including:

- at least two units of VPC Literacy (or units from the VCE English group including VCE Vocational Major Literacy)
- at least two units of VPC Numeracy (or units from the VCE Mathematics group including VCE Vocational Major Numeracy)
- at least two VPC Personal Development Skills units
- at least two VPC Work Related Skills units

Students can also include units from VCE studies, VCE Vocational Major studies, and VET units of competency. VPC students can receive VET credit for 90 nominal hours at the Certificate 1 or above level and receive Structured Workplace Learning (SWL) recognition. Many students will undertake more than 12 units over the VPC.

OTHER VCE SUBJECTS

The following is a list of further VCE subjects on offer from the VCAA. Tyrrell College can explore avenues in providing these via online platforms or through Distance Education. For Study Designs and more information on subjects not already in this handbook, see the VCAA website (www.vcaa.vic.edu.au) or speak to the Careers Advisor, Senior Leaders or the Principal.

- Art Making and Exhibiting
- Australian and Global Politics
- Classical Studies
- Dance
- Drama
- Economics
- English Language
- Environmental Science
- Geography
- Languages – See VCAA for a list and more information
- Literature
- Media
- Music
- Outdoor and Environmental Studies
- Philosophy
- Religion and Society
- Sociology
- Texts and Traditions
- Theatre Studies

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CHECKLIST

To qualify for a **VCE Certificate** students **must** complete a minimum of 16 units which **must** include:

- ❑ 3 units of an English group which **must** include a 3/4 sequence
- ❑ 3 other Unit 3/4 sequences
- ❑ The remaining units can be made up of VCE or VET subjects

To qualify for a **VCE Vocational Major Certificate** students **must** complete a minimum of 16 units which **must** include:

- ❑ 3 units of an English group which **must** include a 3/4 sequence
- ❑ 3 other Unit 3/4 sequences (eg: VCE, VCE VM or VET)
- ❑ 2 units of a maths group
- ❑ 2 units of VCE VM Work Related Skills
- ❑ 2 units of VCE VM Personal Development Skills
- ❑ 180 hours of a Certificate II or above VET subject