

Penola Catholic College

Year 7 - 12

Curriculum Handbook

2021



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Principal's Report - Mr Chris Caldwell

Penola Catholic College is committed to educating the whole person so that each student can strive to achieve their potential. We strive to provide meaningful pathways for students to enrich their God-given gifts and talents. We offer a broad and comprehensive curriculum which is outlined in more detail within this Curriculum Handbook. The subjects on offer include internal subjects as well as VCE, Vocational Education and Training (VET) and Victorian Certificate of Applied Learning (VCAL) to cater for the diversity of pathways for our student population. This booklet has been designed to assist both parents and students to understand the commitment required throughout secondary education experience. It provides information that will assist you in making subject and pathway choices in your study.

The key aspect of this handbook is to enable families to make informed decisions regarding the appropriate programs for their sons or daughters. Prospective students and their families are encouraged to read this handbook carefully and thoroughly, but it is not the only source of information. Students can seek guidance from other family members, members of the teaching staff, other students or someone else who has the experience to assist them. As students mature, they need to take responsibility for exploring their interests and research the requirements of future career paths and study options that they may pursue upon completion of their senior studies.

One of the prerequisites for success in academic studies is a consistent and organized approach to study and classes on the part of the student. As young adults, Penola Catholic College expects students to be self-reliant and independent in their approach to their studies. However, there are ways in which parents and guardians can assist in promoting success. These include:

1. Provide a suitable study area;
2. Encourage sensible management of time and a regular study routine;
3. Encourage student use of the College planner. Dates for assessment tasks are known in advance and should be included in the planner;
4. Offer support and encouragement;
5. Encourage your son or daughter to participate fully in the life of the school as success means more than academic success.
6. Please contact us regarding any problem or issues which you feel are negatively impacting on your son or daughter's progress, as Special Provision arrangements may be sought;

Religious Education Program

A very important part of the College's life is the Religious Education Program. While all staff at Penola Catholic College share a responsibility for the Pastoral Care and are witnesses to the Gospel values, the formal expression of the College's commitment to our faith is the Religious Education Program that operates at each level of the College.

All students will take part in the compulsory Religious Education Program. The Religious Education Program will have two components.

- All students will study Religious Education units in every year that they are at Penola Catholic College.
- All students will attend retreats during their time at Penola Catholic College. In Years 7-11 this will be a one-day retreat experience and in Year 12, students will take part in a three single day retreat experiences.

The Religious Education program and the retreat experiences are compulsory parts of the Program at Penola Catholic College.

Entry into Penola Catholic College is conditional on a student's willingness to be involved in all aspects of the program, including the retreats, and parent support for the program.

We have introduced some significant changes to the program at Year 9 in an effort to enhance the engagement of students in their learning and give them more choice to pursue areas which they enjoy, are good at, or are required for their future career. We have changed our subject counselling process so that students and families are making informed choices. At Year 9 level, English, Mathematics, Religion, Languages and Physical Education are compulsory for the entire year and students must do a minimum of three semesters of Science, Humanities, Languages, Arts and Technology throughout the Years 9 & 10 program. Every Year 9 & 10 student will have other choices of subjects that they either enjoy, are good at, or that are necessary for their future career direction.

The College encourages all students to be involved in our extensive co-curricular program which include sporting, cultural, social and religious activities. The activities on offer are advertised in the College Co-Curricular Program Booklet published at the start of each school year. Each student will be valued, encouraged and nurtured so as to achieve to the best of his or her ability. At Penola Catholic College we strive to develop each student's gifts, we encourage the pursuit of excellence and provide a positive learning environment.

I wish your son or daughter every success at our School and trust that your years as a parent/guardian are positive ones. Let us know if we can assist in providing support as we travel this journey together.

**Chris Caldow
Principal**

Curriculum Overview - Mr John McKay

Learning at Penola Catholic College offers all students a contemporary education based on Real Life Learning. The aims of the curriculum are supported by caring and experienced staff who strive to develop students' gifts, encourage the pursuit of excellence and provide a positive learning environment. The curriculum is supported by teachers using evidence-based practices in their learning with a strong focus on improvement and growth, regardless of a student's starting point.

Year 7 and 8 students are located on the Glenroy campus. The curriculum at these levels offers both breadth and depth across a broad range of core subjects. Digital Technologies (IT) is integrated across the curriculum as well as being offered as a distinct Learning Area. At Year 7, the core curriculum also includes two Semester based units of Languages chosen from French, Japanese and Italian. In Year 8, students select one language which continues into Years 9 and 10. Penola Catholic College also offers students the opportunity to study Content and Integrated Language Learning (CLIL) in all languages across different year levels.

A feature of the Glenroy Campus is its commitment to addressing issues associated with middle schooling and the transition from primary to secondary school education. Matters such as building a strong sense of belonging, providing a safe and positive learning environment and teaching students how to build and sustain better relationships are emphasised.

At Years 7 and 8, students engage in a Project Based Learning (PBL) program focusing on STEAM, an international focus on Science, Technology, Engineering, Arts and Mathematics. The needs of gifted students are addressed through a rich and varied curriculum and through differentiation. Students undertake PAT Literacy and Numeracy tests at Years 7 & 8 so that teachers can use data to personalise learning for students. They also participate in the Renaissance Reading program.

At Years 9 and 10, students begin to design their own program within a structured subject selection process. At Year 9, students undertake year-long studies in the core subjects and choose at least one unit from electives within Science, Humanities, Arts, Technologies and Health. Students continue their studies in the language chosen at Year 8. Alternatively, students may choose to add a language and study two languages into Year 10 and VCE.

In Year 10, students who might have a vocational Pathway are offered the opportunity to begin Foundation VCAL (Victorian Certificate of Applied Learning), or to complete a Certificate I in Employment Pathways as two of their elective choices. This second option leaves the way open for completion of either VCE or VCAL in Years 11 and 12. Through the Accelerated Studies Program, capable students are able to apply to undertake VCE Units 1 and 2 in Year 10; Units 3 and 4 in Year 11; and gifted Year 12 students have the opportunity to engage in specified university studies conducted through the University of Melbourne, Monash University and La Trobe University.

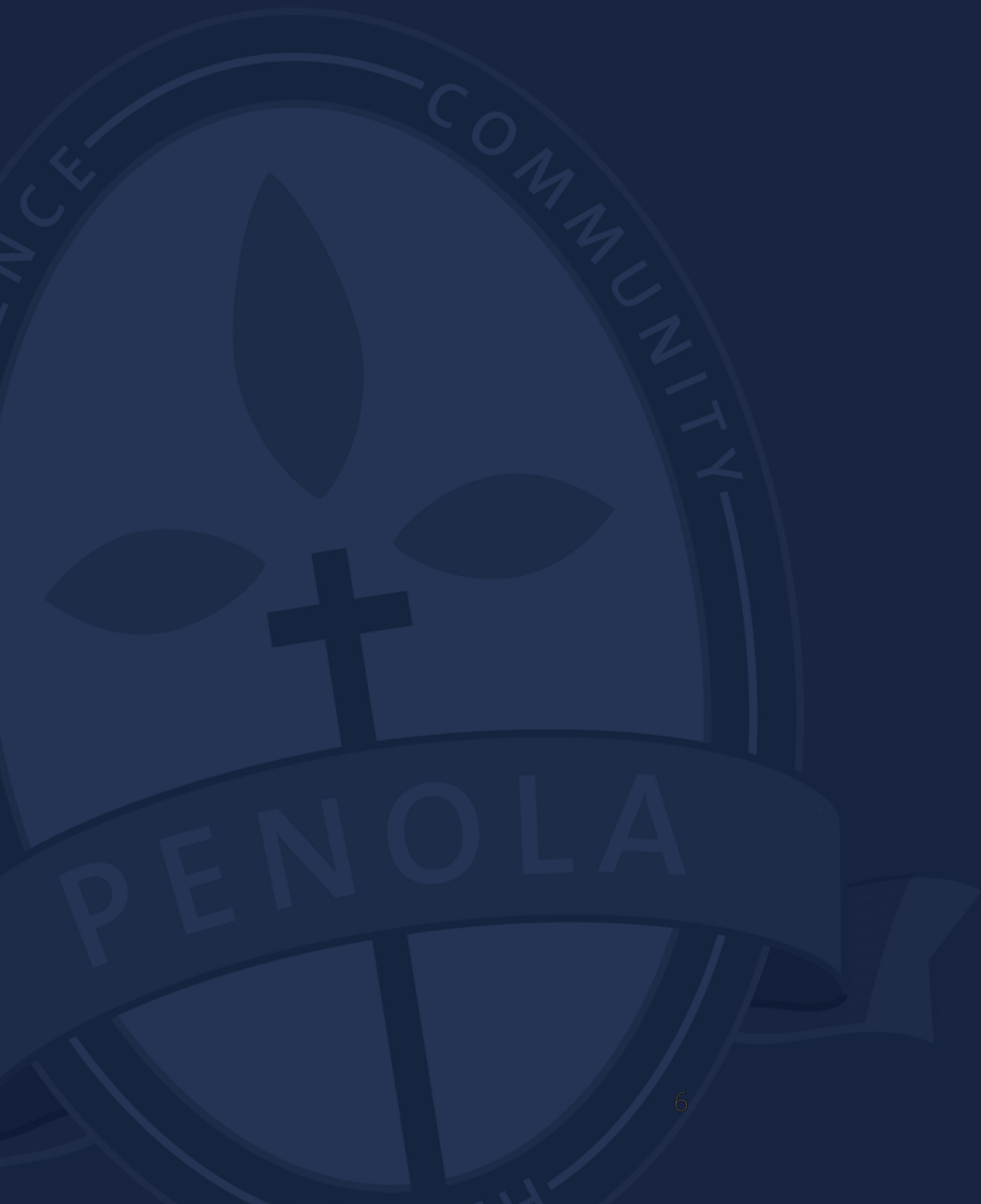
The Work Experience Program is a significant activity for Year 10 students. Over a period of one week, students engage in the world of work undertaking employment positions that they seek out and organise. Students are encouraged to complete extra days during the school holidays if they can make those arrangements.

In Years 11 and 12, VET and over 50 VCE studies, are offered to students in preparation for employment or tertiary education after Year 12. In addition, students have the option of undertaking studies under the Vocational Education in Schools (VETiS) program as part of their VCE here at Penola. The Victorian Certificate of Applied Learning (VCAL) program is also available to those students who have a vocational pathway in mind as opposed to a University pathway.

Section A

Year 7 - 10 Curriculum Offerings

Year 10 Accelerated Program



Year 7 - 10 Curriculum Overview

| Learning Areas | Year 7 (2021) | Year 8 | Year 9 | Year 10 |
|--|--|--|---|---|
| The Arts | Drama Music Visual Arts | Drama Music Visual Arts | Drama Dance Music Studio Art Visual Communication Design Media Studies | Drama Dance Music Music Performance Theatre Studies & Design Studio Art Studio Art - Sculpture Visual Communication Design – Environmental Visual Communication Design – Graphics Media Studies |
| English | English/EAL | English/EAL | English/EAL | English/EAL English Language Literature |
| Health & Physical Education | Physical Education | Health Education Physical Education | Health Education Physical Education Promoting Health & Wellbeing | Physical Education Exercise Science Healthy Living Cert II Outdoor Recreation |
| Humanities | History Geography | History Geography | World War I Citizens & Democracy CLIL (Italian) WWI/Citizens & Democracy Our Abundant World Revolution & the Modern World | World War II Civil, Human Rights & the Law World of Business Our Crowded Earth CLIL (Italian) World War II |
| Digital Technology - IT | Digital Technologies | Digital Technologies | My Program Rules Creative IT | 2D Game Development & Programming Creative IT Business IT |
| Languages | French Italian Japanese | French Italian Japanese CLIL Japanese (<i>Japanese & Humanities</i>) CLIL Italian (<i>RE, Humanities & Italian</i>) CLIL French (<i>Humanities & French</i>) | CLIL Italian (<i>Italian, RE & Humanities</i>) French Italian Japanese CLIL Japanese (<i>Japanese & RE</i>) | French -Taste & Travel France Italian - Italian Teenagers, Italian Entertainment & Lifestyle - Italian Discovery (A cultural & Gastronomical Journey) Japanese – “Art It” through Japan Italian Language CLIL Japanese Language CLIL |
| Mathematics | Mathematics | Mathematics | Mathematics Enrichment Mathematics Foundation Mathematics | Mathematics Enrichment Mathematics Foundation Mathematics |
| Other Studies | STEAM / Project Based Learning | STEAM / Project Based Learning | STEAM / Project Based Learning - Re-Design my Brain - Is Australia Fair? - Our Eco-Challenge | N/A |
| Religious Education | Religious Education | Religious Education | Religious Education CLIL (Italian) Religious Education | Religious Education CLIL (Italian) Religious Education CLIL (Japanese) Religious Education |
| Science | Science | Science | Energy Matters Atomic World and Eco-challenge Atomic World and STEM Electricity | Biology -Genetics & Evolution Biology - Immunology & Disease Chemistry - Chemical Patterns Physics - Force, Energy & Motion Psychology Global Systems and The Universe Forensics |
| Technology | Design & Technology (Wood) Food Studies | Design & Technology (Wood) Food Studies | Design & Technology (Wood) Electronics Food Studies Textiles Technology | Design & Technology (Wood) Electronics Engineering Metal Food Design Food & Culture Textiles - Recyclable Fashion - Fibres & Fabrics |

Year 7 & 8 Curriculum

Year 7

Full Year Studies:

- Religious Education
- English
- Health and Physical Education
- Digital Technologies - IT
- Mathematics
- Science
- Visual Arts

Semester Studies:

Humanities

Students study one semester of each of the following:

- History
- Geography

Languages

Students study one semester of two languages from the following:

- French
- Italian
- Japanese

Performing Arts

Students study a semester each of

- Drama
- Music

Technology

Students study one semester each of the following:

- Design and Technology (Wood)
- Food Studies

STEAM - Science, Technology, Engineering, Arts and Mathematics. At the end of Semester One, all Year 7 & 8 students will be involved in STEAM Project Based Learning (PBL).

Year 8

Full Year Studies:

- Religious Education
- English
- Health and Physical Education
- Digital Technologies - IT
- Mathematics
- Science
- Visual Arts

Information and Communications Technology

The study of Information Technology is integrated across the curriculum.

Languages

Students study either

- Italian
- OR
- Japanese
- OR
- French
- OR CLIL Italian, CLIL French or CLIL Japanese

Semester Studies:

Humanities

Students study one semester of each of the following:

- History
- Geography

Performing Arts

Students study a semester each of

- Drama
- Music

Technology

Students study one semester each of the following:

- Design and Technology (Wood)
- Food Studies

Year 9 & 10 Curriculum

Year 9

Compulsory Full Year Subjects

- **Religious Education**
- **English**
- **Mathematics, Enrichment Mathematics or Foundation Mathematics**
- **Health and Physical Education**
- **Languages** - Students may either continue to study Italian Japanese, and/or French. Students of Italian may elect Italian Immersion (Religious Education & Humanities) - CLIL (Content and Language Integrated Learning)

Compulsory Semester Subjects

Students must choose at least one semester unit from the following Learning Areas

- **Humanities**
- **Science**
- **Technologies**
 - **Digital Technologies - IT**
 - **Design Technologies**
- **The Arts**
 - **Visual**
 - **Performing**

Free Choice Subjects

- **The Arts**
 - **Visual**
 - **Performing**
- **Health**
- **Humanities**
- **Science**
- **Technologies**
 - **Digital Technologies - IT**
 - **Design Technologies**

Double Language Students

If students wish to study two languages in Year 9, the second language is selected as one free choice each semester.

NOTE: The list of choices for each Learning Area for Year 9 is found on page 12 of this Handbook.

Year 10

Compulsory Full Year Subjects

- **Religious Education**
- **English**
- **Mathematics, Enrichment Mathematics or Foundation Mathematics**
- **Physical Education**

Compulsory Semester Subjects

Students must choose at least one semester unit from the following Learning Areas

- **Humanities**
- **Languages**
- **Science**
- **Technologies**
- **The Arts**

Free Choice Subjects

Students have three extra semester units that they must choose for the year. Students can choose from a wide range of subjects listed on page 14 of this booklet, from any of the Learning Areas: Health and Physical Education, The Arts, Technologies, Languages, Science or Humanities.

VCAL Foundation

Students in Year 10 who have a defined vocational pathway can also elect to complete a Foundation level VCAL program for the year, preparing them well for the Year 11 and 12 VCAL course. Entry into this course is by application. See page 18 for more information.

Certificate I in Employment Pathways

Students can also elect to complete a Certificate I in Employment Pathways instead of two units from their elective program. This Certificate prepares students well to take on employment and is a good precursor to the year 11 and 12 VCAL program for those students who are unsure. It does also leave the opportunity open to undertake VCE.

Starting VCE in Year 10

The Accelerated Studies Program offers some VCE Unit 1 and 2 studies to high-achieving students. Internal VET Certificates are also offered to Year 10 students as accelerated programs. Refer to page 17 for details regarding the application process.

NOTE: The list of choices for each Learning Area for Year 10 is found on page 12 of this Handbook.

Year 7 - 9 Contemporary Learning & PBL

PBL - Project-Based Learning

In 2021, the very successful reintroduction of PBL at Years 7 and 8 will continue with a focus on STEAM. Students will engage in working collaboratively to create solutions to real-world problems in a block at the end of Term two.

In 2021, dedicated blocks of time will be given to Year 9 PBL. Each term has a focus topic, from which students create a driving question that they work towards answering throughout the term. Within their groups, students use the PBL time to hypothesise, research and collaborate in preparing a presentation for the end of each term.

A key feature of PBL is the presentation evening. This is where students deliver their findings in a creative way using diverse presentation styles. These evenings include the students presenting to their teachers, parents and other members of the community. In doing this, students have the opportunity to develop effective communication skills and confidence. Within their groups, students also develop co-operative team building skills by learning how to effectively delegate tasks, use team members' strengths to their advantage and negotiate and compromise with each other.

Project Based Learning also provides opportunities for the integration of the learning areas and for the different disciplines to contribute towards the projects. For example, whilst English may be focusing on oral presentation skills and effectively constructing arguments, Humanities may focus on analysing primary and secondary sources, whereas in Religious Education the focus is on moral decision making and moral social teaching. This approach allows for the artificial distinctions between subjects to be blurred and for students to experience their studies as inter-related areas of life rather than as separate entities.

Year 8 Contemporary Learning Lab

The Contemporary Learning Laboratory offers one class of Year 8 students the opportunity to have greater control over their curriculum and learning, whilst ensuring critical literacy and numeracy skills are integrated into the daily routine. This Integrated Program sees one class of students spend each day up until lunch time with one teacher, ensuring consistency of approach and routine whilst allowing for the broadest range of educational experiences.

What type of students is the Contemporary Learning Lab targeting?

Students who:

- Are self-motivated to learn.
- Are interested to follow their passion for learning.
- Are well organised and can work independently.
- Need structure and routine but like to get on with their work.
- Enjoy problem and project-based learning.

How is the Contemporary Learning Lab different from other Year 8 classes?

The CLL classroom will:

- Have one teacher for an integrated approach to English, Maths, Science, Humanities, Religious Education and Health & Physical Education.
- Offer specialist teachers for the study of Arts, Technology and Languages.
- Allow students greater opportunities to focus on, and undertake learning activities individually, in pairs and group settings.
- Have a greater focus on Inquiry or Project-based learning and problem-solving.

What doesn't change in the Contemporary Learning Laboratory

Students will continue to:

- Be involved in all of the Programs offered to Year 8 students including Retreat, Pastoral and Transition Programs, Assemblies, Co-curricular activities and more.
- Learn and further develop critical literacy and numeracy skills.
- Have all major work assessed and reported on.
- Be accountable for the completion and submission of work.

What else is involved?

Students will be asked to:

- Provide leadership and service through Year level fundraisers.
- Complete 20 hours of Co-curricular involvement. This can be achieved either through school or in the community.



Year 9 Contemporary Learning

The Year 9 Contemporary Learning Centre on the Broadmeadows Campus is colourful, spacious, light-filled and has designer furniture to promote collaboration. The Centre is the home of an innovative research-based, best practice curriculum and 21st Century teaching pedagogies. Learning opportunities are designed for students to embody the qualities of the Ideal Penola Learner: to be creative and critical thinkers, respectful, disciplined and ethical citizens of our world, inspired by Gospel values.

Vision

The Year 9 Learning Centre is a place where:

- Every teacher, student and parent feel welcomed and respected
- Each individual takes ownership of the spaces, resources and the wide range of learning and teaching opportunities
- The environment inspires excellence, innovation and promotes collaboration
- Students are self-directed, motivated and independent learners
- Students have opportunities to pursue individual interests and apply critical thinking skills
- Students have highly developed literacy and numeracy skills
- Students and teachers collaborate in assessment processes
- Contemporary technologies are an integral part of learning and teaching
- Teaching is grounded in constructivist learning principles and practices



Curriculum Themes and Big Ideas

Term 1: "Me", My Family and My Peers - Building Resilience
PBL Unit 1: Re-design my brain!

Term 2: "My Community", Exploring Melbourne and its social issues
PBL Unit 2: Is Australia Fair?

Term 3: "Our World", Exploring global issues - A Call to Action
PBL Unit 3: Inspired to Act

Term 4: "Our Future", How do we actively participate in creating a better world?
PBL Unit 4: Our Eco Challenge

The McCormack Centre

The McCormack Centre design has allowed for a change in pedagogy and new learning opportunities for the students. The fluidity and flexibility of the Centre means that it is much easier for groups to work effectively and for classes and teachers to collaborate. It is now possible for teachers to easily combine their classes and offer a more personalised approach to their students. The various spaces offered in and outside the Centre cater for a range of learning activities. The Nexus is often used for activities which involve movement and group work. Groups also make use of outside spaces for investigative research, team and independent learning. Teachers can work with large or small groups of students needing more direction while monitoring a range of activities.

Aims for the Year 9 McCormack Centre

The Year 9 McCormack Centre reflects a holistic approach to teaching and learning whereby spirituality, wellbeing, discipline, curriculum and co-curricular programs are taken into account as teachers and leaders work with each other and with students and parents in our community. The leadership structure models a team approach. The leaders of the Year 9 Centre are also teachers of Year 9 students and their roles encompass all elements of the curriculum and pastoral programs.

We begin by focusing initially on the individual student and then focus on gaining a deeper and broader understanding of, interest in and connection to Our Community and Our World.

We then look toward Our Future for ourselves and for our local and global communities with optimism and as active citizens who are *Inspired to Act*.



Year 9 Pathways Program

| Compulsory Full Year Subjects | Compulsory Semester Subjects | Free Choice Semester Subjects |
|---|---|---|
| <ul style="list-style-type: none"> English Mathematics Religious Education or CLIL RE Health and Physical Education Language - Italian, French, Japanese or CLIL | <p>Choose at least one from each of the Learning Areas:</p> <ul style="list-style-type: none"> Art Humanities - WWI or CLIL Humanities (Italian) Science - The Brain and Earth and Space Technology | <p>Four free choices are to be chosen from the list below from any of the Learning Areas:</p> <ul style="list-style-type: none"> Art Humanities Science Health and Physical Education Technology and French beginner |

Complete list of Semester Subjects available to Year 9 students

| The Arts | Humanities | Languages |
|--|---|---|
| <p>Performing Arts</p> <ul style="list-style-type: none"> Drama Dance Music <p>Visual Arts</p> <ul style="list-style-type: none"> Art Visual Communication Design Media Studies Creative IT | <p>Compulsory Unit</p> <ul style="list-style-type: none"> World War One <p>Free Choices</p> <ul style="list-style-type: none"> Citizens and Democracy or *CLIL Citizens and Democracy (Italian) Our Abundant World Revolution and the Modern World <p>*CLIL Students must complete two Humanities units</p> | <p>All Year 9 students continue their Year 8 Language as follows: Italian, Japanese or French or they begin:</p> <ul style="list-style-type: none"> CLIL Italian - including RE and Humanities CLIL French – including RE CLIL Japanese – including RE Beginners French |
| | | Health & Physical Education |
| | | <ul style="list-style-type: none"> Health and Physical Education |
| Science | Technologies | Notes |
| <p>Compulsory Unit</p> <ul style="list-style-type: none"> Psychology (The Brain) and Earth and Space Science <p>Free Choices</p> <ul style="list-style-type: none"> Our Atomic World & Eco-Challengeable Planet Our Atomic World & STEM Electricity | <p>Digital Technologies - IT</p> <ul style="list-style-type: none"> My Program Rules Creative IT <p>Design Technologies</p> <ul style="list-style-type: none"> Food Studies Electronics Textiles Technology Design and Technology (Wood) | <p>Students in Years 9 and 10 must ensure they complete a minimum of three semester units of Science, Humanities, Technologies and the Arts over the 2 years.</p> <p>Double Language: Students who choose to study French plus Italian or Japanese will complete French as two free choices for the year</p> |

Year 9 Sample Programs

Year 9 Structure

| Semester 1 | |
|------------|---|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Health and Physical Education |
| 5 | Language |
| 6 | Humanities - compulsory unit - WWI |
| 7 | Science - compulsory unit - Brain, Earth, Space |
| 8 | Free Choice |
| 9 | Free choice |

| Semester 2 | |
|------------|-------------------------------|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Health and Physical Education |
| 5 | Language |
| 6 | The Arts choice |
| 7 | Technologies choice |
| 8 | Free choice |
| 9 | Free choice |

As part of the free choices students can choose to apply to accelerate and complete units 1 & 2 of a VCE subject or a VET course

Sample Year 9 Programs

| Semester 1 | |
|------------|---|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Health and Physical Education |
| 5 | French |
| 6 | Humanities - WWI |
| 7 | Science - The Brain and Earth and Space |
| 8 | Arts: Drama |
| 9 | Technologies: My Program Rules |

| Semester 2 | |
|------------|--|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Health and Physical Education |
| 5 | French |
| 6 | Arts: Theatre Performance and Design |
| 7 | Technologies: Textiles |
| 8 | Science: Our Atomic Challengeable Planet |
| 9 | Humanities: Citizens and Democracy |

| Semester 1 | |
|------------|--|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Physical Education |
| 5 | Japanese |
| 6 | Humanities - WWI |
| 7 | Science: The Brain and Earth and Space |
| 8 | Technologies: Electronics |
| 9 | Technologies: Design and Technology Wood |

| Semester 2 | |
|------------|--|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Physical Education |
| 5 | Japanese |
| 6 | Arts: Media Studies |
| 7 | Technologies: Food Studies |
| 8 | Science: Our Atomic World and STEM Electricity |
| 9 | Humanities: Revolution and the Modern World |

| Semester 1 | |
|------------|--|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education (CLIL Italian) |
| 4 | Physical Education |
| 5 | CLIL Italian |
| 6 | Humanities - WWI (CLIL Italian) |
| 7 | Science: The Brain and Earth and Space |
| 8 | Arts: Music Performance |
| 9 | Health & PE: Road to Zero OR French |

| Semester 2 | |
|------------|--|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education (CLIL Italian) |
| 4 | Physical Education |
| 5 | CLIL Italian |
| 6 | Humanities - Citizens & Democracy (CLIL Italian) |
| 7 | Technologies: Creative IT |
| 8 | Arts: Music Performance |
| 9 | Humanities: Our Abundant World OR French |

Year 10 Pathways Program

| | | |
|--|---|---|
| Compulsory Full Year Subjects | Semester Subjects | Free Choice |
| <ul style="list-style-type: none"> • English • Mathematics • Religious Education or CLIL RE (Italian) CLIL RE (Japanese) CLIL RE (French) • Physical Education | <p>Choose at least 1 from each of the Learning Areas:</p> <ul style="list-style-type: none"> • Art • Humanities • Languages • Science • Technology | <p>Choose (3) from the list below from any of the Learning Areas including H&PE.</p> <p>Students can also apply for VCE or VET as part of an Accelerated Studies Program*</p> |

Complete list of semester subjects available to Year 10 students

| | | |
|---|--|---|
| The Arts | Humanities | Languages |
| <p>Performing Arts</p> <ul style="list-style-type: none"> • Drama • Dance • Music • Music Performance- 2 units* • Theatre Performance and Design <p>Visual Arts</p> <ul style="list-style-type: none"> • Studio Art • 3D Art • Visual Communication Design - Environmental • Visual Communication Design - Graphics • Media Studies | <ul style="list-style-type: none"> • WWII • Civil & Human Rights and the Law • World of Business • Our Crowded Earth • WWII (CLIL - In Italian) | <p>All Year 10 students continue their Year 9 Language. Semester 2 Language study is optional and students can choose from:</p> <p>French</p> <ul style="list-style-type: none"> • Taste and Travel France <p>Italian</p> <ul style="list-style-type: none"> • Italian teenagers, Italian Entertainment & Lifestyle • Italian Discovery - a cultural and gastronomical journey <p>Japanese</p> <ul style="list-style-type: none"> • "Art it" through Japan |
| Science | Vocational Pathways | Health & Physical Education |
| <ul style="list-style-type: none"> • Biology - Genetics & Evolution • Biology - Immunology & Diseases • Chemistry - Chemical Patterns • Physics - Force, Energy and Motion • Forensics • Global Systems and the Universe • Psychology | <p>Foundation VCAL <u>or</u></p> <p>Certificate I in Employment Pathways (Full year subject – 2 units*)</p> <ul style="list-style-type: none"> • Both by application only | <ul style="list-style-type: none"> • Exercise Science • Healthy Living • Certificate II Outdoor Recreation - 2 units* |
| | Technology | English |
| | <p>Digital Technologies - IT</p> <ul style="list-style-type: none"> • 2D Games Programming • Creative IT • Business IT <p>Design Technologies</p> <ul style="list-style-type: none"> • Electronics • Engineering Metal • Design and Technology - Wood • Textiles - Recyclable Fashion • Textiles - Fibres and Fabrics • Food Design • Food & Culture | <ul style="list-style-type: none"> • Literature • English Language |

*Students wishing to begin a VCE or VET Certificate study in Year 10 must complete an Accelerated Studies Application Form
NOTE: This is a full year study which = 2 Semester units

Year 10 Sample Programs

Year 10 Structure

| Semester 1 | |
|------------|-----------------------------------|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Physical Education |
| 5 | Humanities choice |
| 6 | Science choice |
| 7 | Languages (continued from Year 9) |
| 8 | Free choice |

| Semester 2 | |
|------------|---------------------|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Physical Education |
| 5 | Technology choice |
| 6 | Art choice |
| 7 | Free choice |
| 8 | Free choice |

As part of the free choices Students can choose to apply to accelerate and complete units 1 & 2 of a VCE subject or a VET Course

Sample Programs

| Semester 1 | |
|------------|---------------------------|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Physical Education |
| 5 | WWII History - Humanities |
| 6 | Biology - Science |
| 7 | French - Languages |
| 8 | Drama - Performing Art |

| Semester 2 | |
|------------|--|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Physical Education |
| 5 | Wood -Technology |
| 6 | VCD - Visual Art |
| 7 | Art - Visual Art |
| 8 | Exercise Science - Health & Physical Education |

| Semester 1 | |
|------------|--|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Physical Education |
| 5 | Our Crowded Earth - Humanities |
| 6 | Chemistry - Science |
| 7 | Japanese (Continued from Year 9) - Languages |
| 8 | VCE Biology Unit 1 (Accelerated Program) |

| Semester 2 | |
|------------|--|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Physical Education |
| 5 | Textiles - Technology |
| 6 | Music - Performing Art |
| 7 | Japanese choice - Languages |
| 8 | VCE Biology Unit 2 (Accelerated Program) |

Sample Year 10 Vocational Pathways Program

| Semester 1 | |
|------------|--|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Physical Education |
| 5 | Geography Our Crowded Earth - Humanities |
| 6 | The Universe - Science |
| 7 | French (continued from Year 9) - Languages |
| 8 | Certificate I in Employment Pathway |

| Semester 2 | |
|------------|-------------------------------------|
| 1 | English |
| 2 | Mathematics |
| 3 | Religious Education |
| 4 | Physical Education |
| 5 | Food Design - Technology |
| 6 | Art - Visual Arts |
| 7 | Engineering Metal |
| 8 | Certificate I in Employment Pathway |

Year 10 Accelerated Studies Program

Starting a VCE Study in Year 10

Students who demonstrate very high levels of achievement in Year 9 subjects may be accepted in the Accelerated Studies program allowing students to start a VCE Unit 1 and 2 Study in Year 10. Students selected for this program must be receiving predominantly A or A+ grades in the equivalent subject in Year 9. For example, a Year 9 student wishing to accelerate in Biology needs to have A or A+ in Science. Applicants are also required to be A/A+ students in English and have a B+ average in all other Year 9 subjects.

Listed below are the Year 11 units being offered as part of the Accelerated Studies Program. Students who feel they are capable of undertaking Year 11 studies are invited to apply for one of the following in place of Year 10 free choices.

Studies being offered are:

- Accounting
- Art
- Biology
- Business (VET)
- Business Management
- Catholic Youth and Ministry Leadership (VET)
- Computing
- Creative Industries 3D Animation (VET)*
- Drama
- Economics
- Electrotechnology (VET) - Electronics
- Engineering (VET)
- Food and Technology
- Geography
- Health and Human Development
- History
- Hospitality (VET)



- IDMT - Game Programming (VET)
- Italian
- Legal Studies
- Media
- Music Solo & Group Performance
- Outdoor and Environmental Studies
- Outdoor Recreation (VET)*
- Product Design and Technology
- Psychology
- Religion & Society OR Text & Traditions
- Retail Cosmetics (VET)*
- Salon Assistant (VET)*
- Sport and Recreation (VET)
- Studio Arts
- Screen and Media (VET)
- Technical Production (VET)
- Visual Communication and Design

Please note: Students can apply to accelerate in VET subjects. These are nationally accredited courses. Students must complete the 2-year course of study in order to gain a Certificate. This excludes those VET studies marked with an asterisk (*) which are one-year Certificate courses.

Conditions of Acceptance

Acceptance into this program is dependent upon:

- Very high levels of achievement in your Year 9 subjects. Students must be receiving predominantly A or A+ grades in the equivalent subject in Year 9 and in English as well as a B+ average in all other subjects.
- Whether sufficient numbers of Year 11 students have selected the subject to warrant the subject being run.
- Class sizes and the availability of a place within a Year 11 class. Year 11 students take precedence when there is high demand.
- Having demonstrated excellent work practices throughout Year 9 in all subjects.
- Recommendations from a number of Year 9 teachers and the Year Level Co-ordinators.
- Staffing and timetabling needs of the College.
- The signing of a declaration to accept the conditions of the program by both parents and the student.
- The return of the declaration by the specified date.

Undertaking a Year 11 study in Year 10 **does NOT mean that you do one subject less in Year 11.**

It is desirable that in Year 11 students continue the Units 3 and 4 studies in the VCE subject commenced in Year 10. By doing this, students gain a bonus on their VCE study score at the end of Year 12.

Please note: Completing one Unit 3 and 4 study in Year 11 **does NOT mean one less subject in Year 12.** The aim of accelerating is to have successfully completed six subjects by the end of Year 12 to gain bonus ATAR points.

Senior Programs

VCE

VET

VCAL

Accelerated Studies



Senior Pathways Program

Penola is offering the opportunity for selected students to undertake a new structure in addition to the existing VCE program. At the end of year 10 it is often difficult to decide between VCE or VCAL. The decision is most often based on test and exam results, university pathway or employment aspirations, perception of academic ability, the influence of family and friends and the pressure placed on young people by the changes in society and the labour market. For many of our students the existing VCE program or VCAL will meet their needs and should lead to great outcomes.

However, for others these two courses can fall short of people's expectations. The VCE Pathways Program offers the following advantages:

1. To develop a clear career pathway that can lead into either employment, TAFE or university study
2. Attain three certificates after successfully completing both the year 11 and year 12 course that includes:
 - VCE
 - VCAL Intermediate and/or Senior
 - Certificate II in a selected VET program
3. Develop the necessary study skills and career pathway plan during year 11 to make an informed decision as to which year 12 course to undertake:
 - A scored VCE course
 - The non-scored VCE Pathways course
 - VCAL Senior
4. By undertaking the VCE Pathway Program students still have the same opportunities to undertake university, TAFE or employment beyond high school.

Before making a decision it is mandatory that students and parents must be involved in the following process:

- Consult with careers staff
- Complete an application
- Undertake to participate in a full year program
- Review pathway planning at least twice per year



Overview Years 11 & 12

Senior Programs

| Learning Areas | Year 11 | Year 12 |
|--|--|---|
| The Arts | | |
| Performing Arts | Drama 1 & 2 Dance 1 & 2 Music Performance 1 & 2 Certificate III in Music Industry (Sound Production) 1 & 2 (VET) | Drama 3 & 4 Dance 3 & 4 Music Performance 3 & 4 Certificate III in Music Industry (Sound Production) 3 & 4 (VET) |
| Visual Arts | Art 1 & 2 Studio Art 1 & 2 Visual Communication – Design 1 & 2 Media Studies 1 & 2 | Art 3 & 4 Studio Art 3 & 4 Visual Communication – Design 3 & 4 Media Studies 3 & 4 |
| English | English/EAL 1 & 2 English Language 1 & 2 Literature 1 & 2 Bridging EAL (Unit 1 & 2 only – no Year 12 equivalent) | English/EAL 3 & 4 English Language 3 & 4 Literature 3 & 4 |
| Health & Physical Education | Health & Human Development 1 & 2 Outdoor & Environmental Studies 1 & 2 Physical Education 1 & 2 Cert III in Sport & Recreation 1 & 2 (VET) | Health & Human Development 3 & 4 Outdoor & Environmental Studies 3 & 4 Physical Education 3 & 4 Cert III in Sport & Recreation 3 & 4 (VET) |
| Humanities | Accounting 1 & 2 Business Management 1 & 2 Classical Studies 1 & 2 Economics 1 & 2 Geography 1 & 2 20 th Century History 1 & 2 Legal Studies 1 & 2 | Accounting 3 & 4 Business Management 3 & 4 Classical Studies 3 & 4 Economics 3 & 4 Geography 3 & 4 Australian History 3 & 4 Global Politics 3 & 4 Legal Studies 3 & 4 |
| Digital Technology - IT | Applied Computing 1 & 2 Cert III in IDMT Game Programming (VET) Cert II in Business Administration (VET) | Software Development 3 & 4 Data Analytics 3 & 4 Cert III in IDMT Game Programming (VET) Cert III in Business Administration (VET) |
| Languages | French 1 & 2 Italian 1 & 2 Japanese 1 & 2 | French 3 & 4 Italian 3 & 4 Japanese 3 & 4 |
| Mathematics | Specialist Maths 1 & 2 Maths Methods 1 & 2 General Maths M 1 & 2 General Maths F 1 & 2 | Specialist Maths 3 & 4 Maths Methods 3 & 4 Further Maths 3 & 4 |
| Religious Education | Religious Education Religion & Society 1 & 2 | Religious Education Religion & Society 3 & 4 |
| Science | Biology 1 & 2 Chemistry 1 & 2 Physics 1 & 2 Psychology 1 & 2 | Biology 3 & 4 Chemistry 3 & 4 Physics 3 & 4 Psychology 3 & 4 |
| Technology | Food Studies 1 & 2 Product Design & Technology (Textiles/Wood) 1 & 2 Systems Engineering 1 & 2 Cert II in Engineering 1 & 2 (VET) Cert II in Hospitality (Kitchen Operations) 1 & 2 (VET) Cert II in Salon Assistant 1 & 2 (VET) Cert II in Retail Cosmetics 1 & 2 (VET) | Food Studies 3 & 4 Product Design & Technology (Textiles/Wood) 3 & 4 Systems Engineering 3 & 4 Cert II in Engineering 3 & 4 (VET) Cert II in Hospitality (Kitchen Operations) 3 & 4 (VET) |
| VCAL | VCAL Numeracy VCAL Literacy VCAL Personal Development VCAL Work Related Skills 1 & 2 | VCAL Numeracy VCAL Literacy VCAL Personal Development VCAL Work Related Skills 3 & 4 |
| VET | Allied Health Animal Studies Automotive Building & Construction Community Services Early Childhood Engineering Hospitality - Kitchen Operations Horticulture Landscaping Salon Assistant Retail Cosmetics Music Industry Plumbing | Allied Health Animal Studies Automotive Building & Construction Community Services Early Childhood Engineering Hospitality - Kitchen Operations Horticulture Landscaping Music Industry Plumbing |
| | <p><i>These are subjects that are part of the VCAL program and are external to Penola Catholic College i.e. Kangan, Holmesglen, NCAT, Melbourne Polytechnic, Angliss etc.</i></p> <p>NOTE: Students cannot choose these VET subjects if they are doing VCE.</p> | |

Section B: VCE Program

Australian Tertiary Admission Rank (ATAR)

The ATAR is a nationally agreed ranking based on all people of a comparable age throughout the nation. Calculation is based on the scaled scores for English (i.e. any English subject taken from the English group), the next best three scaled scores and 10% of any fifth and sixth scaled score that is available. Study scores will be available for VCE-VET (Multimedia, Hospitality, Community Recreation, Engineering, Business Administration and Information Technology). These units can be in the “best four” or the “primary four” when calculating ATAR Score. The remaining VET Certificates will not be scaled, based on the information available from the VCAA at the time of this booklet being printed. However, they contribute a 10% increment as the 5th and/or 6th subject, by averaging grades of the “best four” or the “primary four”. Each year the College produces a VCE/VCAL Policies and Procedures Handbook for students. The handbook contains the VCAA rules and regulations relevant to students and Penola Catholic College’s own requirements. It is essential that students and parents make themselves familiar with the content of this handbook.

Subject Selection Requirements

Entry Requirements for VCE - Units 1 & 2

At Penola Catholic College, Year 10 students take part in the subject selection and transition program in Term 3, in order to guide them as they make their subject choices from the wide range of Senior Programs offered at the College, including VCE, VET and VCAL studies.

While the College encourages students to pursue their interests, we realise that sometimes the career pathways, and consequently the subject choices, are not always realistic and appropriate to the student’s academic ability. Students sometimes choose subjects that they struggle with, and ignore the recommendation from the subject teacher that there is a concern with the student continuing a particular subject in VCE Units 1 and 2.

In an attempt to refine the subject selection process further, the following recommendation is made:

Penola Catholic College recommends that undernormal circumstances, a student must be able to achieve an average of a “C” grade in any particular subject before he/she may continue with that same subject in Units 1 and 2. In the case where a student selects a VCE subject which is not directly studied or offered by the College in Year 10, his/her general level of achievement in a similar area of study will be taken into account.

For Mathematics the following applies:

- Specialist Maths: Average “A” grade
- Maths Methods and General Maths M: Average “B” grade
- General Maths F: Average “C” grade

For Science the following applies:

- Chemistry and Physics: Average “B” grade

Students who are not capable of achieving a “C” average grade will be looked at individually. If necessary, discussions with both parents and students will be held to arrive at a decision. It is hoped that this recommendation will help guide students towards more realistic subject choices at the senior level, as well as encourage all students to work to their full potential and be consistently motivated and focused in their studies throughout their education.

Subject Selection Process for Current Year 10 Students

- Students undertake an extensive Transition Program as part of the Pastoral Program throughout Term 3.
- They complete their subject selection form, including parents' signature.
- Students bring completed form to course advice and are given an individual appointment to discuss their subject selection and complete the online process
- Year 10 Semester One results are checked against student subject choices on the Course Counselling Day.
- The Course Confirmation Committee follows up students where there is a concern about the subjects that have been chosen.
- Meetings will be held in Term 4, as required, with the following staff members: Deputy Principal Teaching & Learning, Senior Programs Co-ordinator, the relevant Head of Learning, Year Level Co-ordinators and the Career's Team Co-ordinator.

Section C:

Vocational Education & Training (VET)

1. VET Programs for VCE & VCAL Students

VET subjects are a group of optional choices available for VCE students. Each VET subject is a one- or two-year program that provides an opportunity for students to achieve a nationally recognised qualification, and as well, will contribute 'Units' towards achieving their VCE. Most VET subjects can be "scored" which means there will be a final exam at the end of Year 12 just like normal VCE academic subjects. This means that VET subjects are an industry based, applied learning option that can have a study score which will contribute towards the ATAR (Australian Tertiary Admissions Rank). If you do not want the subject "scored" towards an ATAR, that is your choice. In that case it will simply count towards your VCE certificate. A maximum of only two VET studies which can obtain a study score will be counted by the VCAA in the primary four which contributes towards an ATAR score.

By combining both vocational and general education, VET enables VCE and VCAL students to create more options towards further training or work and enhances existing pathways to TAFE and University. A student who successfully completes two years of study in either VCE or VCAL and includes a VET subject as part of their program, can therefore achieve two certificates because any VET subjects taken have "dual recognition". In other words, students will be awarded a TAFE certificate plus the VCE or VCAL. It also may allow any VCE or VCAL student to enter TAFE at a higher level than other students without a VET qualification.

VET courses have a practical "hands-on" component enabling students to "learn by doing" either at school, at the Registered Training Organisation (RTO) or out on a work placement. VET can give students an advantage into employment, apprenticeships and traineeships.

As most VET subjects are a two-year certificate course, they are not broken up into 4 units like VCE subjects. Therefore, VET subjects should only be taken at the beginning of Year 11. A subject change into a VET subject may prove very difficult or impossible for Semester 2 of Year 11 or at the beginning of Year 12 so students must choose wisely at the start of Year 11.

Penola Catholic College offers a wide range of VET subjects through a network of Registered Training Organisations (RTO) that includes Kangan Institute, Holmesglen, NCAT, Educational Living and IVET. While most of the courses are run on our Penola Broadmeadows Campus, in some cases students are required to attend one of the RTO sites for courses Penola does not run on-site. These RTO sites are off campus and VET subjects are taught at the RTO site usually on one day per week (Tues, Wed or Thurs).

Note: Students electing a VET program MUST provide their USI (Unique Student Identifier) code to the VET Co-Ordinator before the last day of the subject selection period or they cannot be accepted and enrolled in VET. If they delay providing their USI, they will usually miss out on a place in their chosen VET Subject.

VET Fee Payments:

As we are dealing with VET training providers (RTOs) who are outside of Penola, there needs to be a small parent contribution for each VET subject just like VCE & VCAL subjects. This covers materials used, registration, certification and RTO admin requirements. Penola pays all VET & SBAT tuition fees for students.

2. Apprenticeship Programs

School Based Apprenticeships & Traineeships (SBATs) can be set up for some Year 12 VCAL students and their week involves three days at school and two days working with an employer. They must also attend a one-week block of TAFE training every 6 weeks just like a normal full-time apprentice. This part-time apprenticeship is a nationally recognised qualification but is only suitable for those students who know the industry they want to work in, and most importantly, know an employer who is committed to them as a future apprentice. The SBAT is recognised by VCAA as contributing to the Learning Strands of VCAL and therefore counts towards their VCAL certificate.

The SBAT includes a Training Contract and qualifications registered with Skills Victoria. Through Penola, the Training Plan is signed with a Registered Training Organisation (RTO). It is responsible for training and assessment of the SBAT and forms a key part of the VCAL program.

A WARNING THOUGH - This SBAT Program is **ONLY** available to Year 12 VCAL students who have done their Year 11 work placement in the industry **AND** have an employer who genuinely wants to put them on as an apprentice. There must be no possibility of the SBAT “falling through” as this would mean the student may not gain their Senior VCAL certificate, thereby not completing Year 12 level.

SBAT Areas include: Automotive, Business, Carpentry, Community Services, Electrotechnology, Info Tech, Plumbing and Warehousing.

Note: Students considering an SBAT must contact the Careers Centre at school for advice.

VET Subjects Offered

VCE and VCAL Students

- Business (\$80)
- Creative Industries - 3D Animation (\$140)
- Catholic Youth Ministry and Leadership (\$75)
- Dance (\$100)
- Electrotechnology - Integrated Technologies (\$160)
- Engineering (\$180)
- Hospitality (\$220)
- Information, Digital Media & Technology (\$120)
- Outdoor Recreation - Year 10 only (\$160)
- Retail Cosmetics (\$240)
- Salon Assistant (\$250)
- Screen and Media (\$160)
- Sport & Recreation (\$160)
- Technical Production (\$120)

VET Subjects offered off Campus

VCAL Students Only

- Building and Construction (\$180)
- Early Childhood (\$160)
- Plumbing (\$180)
- Northern Melbourne VET Cluster Option (varied costs)
- Community Services (\$160)
- Animal Studies (\$160)
- Horticulture (\$160)
- Electrotechnology (Career Start) (\$180)
- Animal Studies (\$180)
- Fashion (\$160)
- Allied Health (\$180)
- Automotive (\$180)

Vocational Education and Training Options

The 14 programs delivered at Penola Catholic College that can be combined with VCE and most VCAL studies are listed below. Although a student may undertake an unlimited number of VET studies to satisfactorily complete the VCE requirements, ONLY TWO VET studies which can obtain a study score will be counted by the VCAA in the primary four which contribute towards an ATAR Score.

| VET Certificates | Possible VCE Studies To Support | VET UNITS |
|--|---|---|
| Screen and Media Certificate III | Studio Arts 1-4 Computing 1-4 | Multimedia 1-4 |
| Creative Industries – 3D Animation Certificate III | Visual Communication & Design 1-4 Media 1-4 | 3D Animation 1-2* |
| Dance | Music 1-4 Drama 1-4 | |
| IDMT – Game Programming, Certificate III | Software Development 3-4 Applied Computing 1-2 | IDMT – Game Programming (VET) 1-4 |
| Engineering Certificate III | Product Design and Technology (Metal) 1-4 Visual Communication and Design 1-2 General Maths | Engineering 1-4 |
| Hospitality Certificate II (Kitchen Operations) | IDMT – Game Programming 1-4 Materials (Food) 1-4 Maths (any) 1-2 | Hospitality 1-4 |
| Sport & Recreation Certificate III Outdoor Recreation Cert. II (Yr 10 only) | Physical Education 1-4 Health Education 1-2 English 1-2 | Sport & Recreation 1-4 Outdoor Recreation 1-2* |
| Business Certificate II and III | Business Management Accounting Legal Studies | Business 1-4 |
| Salon Assistant Certificate II Retail Cosmetics Certificate II | Business Management Business Certificate II Health and Human Development 1-2 | Salon Assistant 1-2* Retail Cosmetics 1-2* |
| Technical Production Certificate III | Music Performance 1-2 Information Technology 1-2 Maths (any) 1-2 | Technical Production 1-4 |
| Electrotechnology-Integrated Technologies Certificate II | Systems Engineering Physics Maths | Electrotechnology 1-4 |
| Catholic Youth Ministry and Leadership Certificate III | Supports any other study and offers an opportunity in a VCE study | Catholic Youth Ministry and Leadership 1-4 |

Section E: Accelerated Program

Penola Catholic College offers students the opportunity to participate in one of the two programs outlined below while completing the VCE program. It must be noted that selection of students to undertake these studies is based on availability of places in the classes and demonstrated academic ability.

The aim of accelerating is to have successfully completed six subjects by the end of Year 12 so as to gain bonus ATAR points.

Year 12 subjects in Year 11

First year VCE students are able to apply for **one** Unit 3 & 4 study. Students applying to accelerate must be achieving **A/A+** grades in the study area selected and in English, as well as having a **B+** average in all other Year 10 subjects. The list of Unit 3 & 4 subjects students can choose from are indicated below. By taking a Year 12 subject in Year 11 and five subjects in Year 12, students will be able to maximise their ATAR by successfully completing six Unit 3 & 4 sequences.

If you complete one Unit 3 & 4 study in Year 11, it does NOT mean you undertake one less subject in Year 12.

Please note: Most VET subjects are completed over 2 years.

Religious Education

- Religion and Society
- Catholic Youth Ministry and Leadership (VET)

English

- Literature

Health and Physical Education

- Outdoor and Environmental Studies
- Physical Education
- Health and Human Development
- Sport & Recreation (VET)

Humanities

- Geography
- Business Management

Economics

- Legal Studies
- Accounting (Units 1 & 2 pre-requisite)
- History
- Business (VET)

Information Technology

- Applied Computing
- Data Analytics
- Cert. III in IDMT - Game Programming (VET)
- Software Development

Languages

- Italian (Italian Units 1 & 2 pre-requisite)

Performing Arts

- Drama
- Music (Units 1 & 2 pre-requisite)
- Technical Production (VET)

Science

- Psychology
- Biology

Technology

- Product Design and Technology – Wood & Textiles
- Systems and Technology (Electronics)
- Food Studies
- Hospitality (VET)
- Salon Assistant (VET) - 1 year only
- Retail Cosmetics (VET) - 1 year only
- Electrotechnology (VET)
- Engineering (VET)

Visual Arts

- Art
- Studio Arts
- Media
- Visual Communication Design
- Cert. III in Screen and Media (VET)
- Cert. II in Creative Industries - 3D Animation (Media)

University Studies in Year 12

Melbourne, Monash and LaTrobe Universities offer Year 12 students the opportunity to enrol in one of their accelerated programs in the areas of:

- Arts / Humanities
- Business and Economics
- Information Technology
- Languages
- Mathematics / Science

Costs involved include an administration fee, books, transportation to and from the University and costs associated with materials needed for the courses offered. Details are found in the University publications.

These courses are usually available outside of school hours. Students would enrol in one additional study apart from their normal VCE load. While such additional University study would be very demanding, this experience would also offer the following benefits:

- A 10% bonus on your Australian Tertiary Admission Rank (ATAR)
- Benefit in tertiary selection
- Gain credit towards future studies at University of Melbourne, Monash University, LaTrobe University or other Universities
- Experience a taste of University life.

Any student thinking of taking up such an opportunity would do well to seek advice from current teachers prior to submitting an application. The Universities recommend that only students achieving A / A+ grades and / or a 40+ score in a VCE subject, should consider applying. The University also expects a B+ average in all other Year 11 subjects.

Students wishing to apply need to seek information from the Deputy Principal: Teaching and Learning. Should an application be accepted, students would be advised to seek out a teacher at Penola to act as a mentor and as a source of advice.

Section F:

Senior Studies Programs

A VCE or VCE-VET program is a two-year course plan outlining the combination of units a student aims to study. Students are encouraged to plan their studies around their interests, talents and career directions or pathways. It makes good sense to map out a program of study for the two years of the VCE that gives a sense of meaning and purpose to the final two years of secondary education. A program planner is provided in the rear of this Handbook to assist in that process. Many students will have a clear sense of direction and will construct quite specific programs. Some students, who are still working through possible career directions and pathways can construct programs from a variety of curriculum areas to explore their abilities and interests in a broad set of studies. The VCE offers both a general and a vocational education over the final two years of secondary education to all students. In constructing their program, students should consider the possible pathways that lead to University, TAFE, apprenticeships or employment.

VCE and VCE-VET Studies

- Accounting
- Art
- Biology
- Bridging EAL
- Business (VET)
- Business Management
- Catholic Youth Ministry and Leadership (VET)
- Chemistry
- Classical Studies
- Creative 3D Animation (VET)
- Applied Computing
- Dance (VET)
- Drama
- Economics
- Electrotechnology Integrated Technologies (VET)
- Engineering (VET)
- English/EAL
- English Language
- Food Studies
- Geography
- Global Politics
- Health and Human Development
- History
- Hospitality (Kitchen Operations) (VET)
- Data Analytics
- IDMT-Game Programming (VET)
- Screen and Media (VET)
- Languages:
 - French
 - Italian
 - Japanese
- Legal Studies
- Literature
- Mathematics:
 - Mathematical Methods
 - General Mathematics
 - Specialist Mathematics
 - Further Mathematics
- Media
- Music Performance (Solo and Group)
- Outdoor and Environmental Studies
- Physical Education
- Physics
- Product Design and Technology (Wood and Textiles)
- Psychology
- Retail Cosmetics (VET)
- Religion and Society
- Salon Assistant (VET)
- Software Development
- Sport & Recreation (VET)
- Studio Art
- Systems Engineering
- Technical Production (VET)
- Visual Communication Design

VCAL Studies

- VCAL Literacy
- VCAL Numeracy
- VCAL Personal Development and Religious Education
- VCAL Work Related Skills

The VCE and VET subject descriptions and the VCAL program are grouped according to the following Key Learning Areas:

- Religious Education
- English
- Mathematics
- The Arts
 - Performing Arts
 - Visual Arts
- Health and Physical Education
- Humanities
- IT-Digital Technologies
- Languages
- Science
- Technology
- VCAL

The Victorian Certificate of Applied Learning

Literacy

Numeracy

Work Related Skills

Religious Education and Personal Development Skills

Planning your VCAL Program



Section D: VCAL Program

VCAL is an equivalent Senior Certificate to sit alongside VCE to help young people develop knowledge and skills to prepare for further training and employment.

VCAL has 3 levels: Foundation, Intermediate and Senior.

Students can start at the level that matches their needs and abilities, for example in Year 11 at the Foundation or Intermediate level, and, in the following year, move to complete a second VCAL Certificate at the Intermediate or Senior level.

VCAL students are required to apply to participate in the VCAL program, which is followed up with an interview. Successful applicants are required to abide by the conditions outlined in a declaration they sign.

VCAL at Penola Catholic College has a mandatory requirement for all students in the program to find a structured work placement or a School based apprenticeship or traineeship.

Why was it developed?

VCAL was developed to offer a viable, vocational pathway for all Senior students. Penola VCAL students are expected to actively develop and update a robust portfolio to provide a potential employer with useful information and students with an accurate account of their achievements.

Curriculum

Students undertake 10 semester length studies, each of 100 nominal hours (50 hours of formal contact in classroom and/or workplace, plus 50 hours informal study just like VCE) are taken to complete the VCAL certificate.

There are 4 strands:

- Literacy and Numeracy
- Industry Specific Skills
- Work Related Skills
- Personal Development Skills incorporating Religious Education

Five units must be taken from the

4 strands:

- Two Literacy and one Numeracy from the first strand
- One Industry Specific unit
- One Work Related unit
- One from the Personal Development strand

The remaining 5 units can come from any strand or combination of strands.

How might a VCAL program look?

The VCAL course is tailored to meet a student's interest and career pathway needs. Students who select VCAL will have an interest in developing a range of general and specific skills to better prepare them for life and for employment. The subjects available within each strand are as follows:

Literacy and Numeracy are both compulsory. VCAL students will undertake two VCAL Literacy Units and one VCAL Numeracy Unit.

Industry Specific Skills will be developed via selected VET Certificate Units. It is compulsory to have a VET Study as part of the VCAL Program.

In most cases a VET program may be delivered by an offsite provider. It is mandatory that students attend their VET provider.

Work Related Skills are developed by participating in two VCAL Work Related Skills Units. In addition to these compulsory units, work skills are further developed by work placements or Christian Service that the student may do throughout the year.

Personal Development Skills are also compulsory units and incorporate aspects of the College Religious Education Program. Year 11 VCAL students undertake two VCAL Personal Development Units. Year 12 VCAL Students will complete one VCAL Personal Development Unit based on the Year 12 Religious Education Program.

Additional Opportunities:

Students will also be offered the opportunity to complete the following certificates:

- Responsible Service of Alcohol Certificate
- Responsible Service of Gaming Certificate
- Food Safety Training Certificate
- Level 2 First Aid Certificate

All of these options are proved to increase employment opportunities for students.

Is it possible to move across VCAL levels, to move from VCE to VCAL, or to move from VCAL to VCE?

The level of the Literacy and Personal Development units as well as four or more other units determine the level of the VCAL Certificate. If a student turns out to be enrolled at an inappropriate level – either too high, or too low – the student can be re-enrolled.

Under certain conditions it is possible to move from VCE to VCAL and VCAL to VCE. A student who has completed eight or more VCE Units 1-2 sequence may be deemed eligible to enrol in VCAL Senior level.

How is VCAL assessed and awarded?

Students must successfully achieve each learning outcome and show they are competent in each unit of the VCAL program. VCAL units are not graded in the same way in which VCE units are graded. Where VET units are included in a VCAL program, grades will be included. The VCAL Certificate issued at the end of the year by the Victorian Curriculum and Assessment Authority (VCAA) will have a statement of results that includes all VCE, VCE-VET and VCAL units students undertake in their VCAL program.

Pathways

VCAL prepares students for entry into TAFE Certificate courses, apprenticeships, traineeships and general employment. VCAL programs are not designed to give an ATAR score and will not lead directly to University. A senior VCAL certificate opens up many options for students. RMIT and Victoria University are currently considering the option for Senior level VCAL graduates. Employers are starting to favour the VCAL course because it develops literacy and numeracy skills, work related skills, industry specific skills along with personal and employability skills. Penola VCAL Students will exit with a full account of recorded experiences through use of platforms that enable all experiences to be captured.

VCAL Literacy Skills

Literacy will help students develop the skills and knowledge to read and write a range of texts on everyday subject matters where practical, relevant documents will be utilised to provide examples of what will be required in the workplace.

Reading and Writing

Learning outcomes include:

- Writing for self-expression
- Writing for practical purposes
- Writing for public debate
- Reading for self-expression
- Reading for practical purposes
- Reading for knowledge
- Reading for public debate

Oral Communication

There are four learning skills:

- Oracy for self-expression
- Oracy for Knowledge
- Oracy for Practical Purposes
- Oracy for exploring issues and Problem Solving

Assessment methods

The range of assessment methods are used to verify successful completion of learning outcomes of each VCAL unit in the VCAL program. Assessment methods are flexible and include a student portfolio of evidence of learning such as:

- Self-assessment
- Teacher observation
- Reflective work journals
- Student log books
- Reports and essays
- Oral and written presentations
- Research projects

VCAL Numeracy

Year 11 VCAL: Numeracy

This unit looks at maths applied to tasks which are part of the students normal routine and also outside their immediate personal environment such as the workplace and the community, whether first hand or portrayed by the media. The maths involved includes measurement, shape, numbers and graphs.

The units focus on:

- Numeracy for Practical Purposes – Design and Measuring
- Numeracy for Personal Organisation
 - Money, Time and Location
- Numeracy for Interpreting Society - Data and Numerical Information

Year 12 VCAL: Numeracy

Numeracy aims to enable students to explore maths beyond the familiar and everyday use to its application in wider, less personal context such as newspapers, workplace documents and procedures, and specific projects at home or in the community. The mathematics involved would include measurement, graphs and statistics, use of maps and directions and an introduction to the use of formulae and problem-solving strategies.

This unit focuses on:

- Numeracy for Practical Purposes
- Numeracy for Personal Organisation
- Numeracy for Interpreting Society
- Numeracy for Knowledge

Foundation Units

Foundation units will be offered where applicable to students at that level in preparation for intermediate participation.

All subjects at Foundation level have the same title and is a pre-requisite for the higher level.



VCAL Work Related Skills

The purpose of the work related skills is to develop employability skills, knowledge and attitudes valued within community and work environments as a preparation for employment. The development of employability skills within this strand provides students with a capacity to consider and choose from the range of pathways open to students. In both years', students must complete a minimum of 100 hours of structured workplace learning. Please note it is compulsory for students to find a work placement.

Curriculum

Work Related Skills Intermediate Unit 1

Year 11:

- Learn about basic conditions and entitlements of a specific industry
- Obtain and communicate information in response to a work-related Occupational Health and Safety issue
- Develop knowledge and understanding of OH&S in a work-related context
- Identify workplace safety hazards
- Work in a team to follow work procedures within a work-related activity
- Use information and communications technology in relation to a work-related activity

Foundation Units

Foundation units will be offered where applicable to students at that level in preparation for Intermediate participation. All subjects at Foundation level have the same title and is a pre-requisite for the higher level.

Year 12:

- Research information about a specific industry or workplace from a variety of sources
- Communicate ideas and information about a range of OHS requirements in the work place
- Understand Hazard Identification, Risk Assessment and Control of hazards and risks within the workplace
- Demonstrate an understanding of the OHS issues - resolution process
- Work in a team to follow safe work procedures within a complex work- related project
- Use information and communications technology in relation to a complex work-related project
- Use workplace technology and equipment in accordance with OHS guidelines in a complex work-related project



Personal Development & Religious Education

Aims

The course aims to develop practical abilities and appreciation of a range of values essential to Christian communal life, including:

- Personal self-esteem and confidence
- Social justice and responsibility
- Care for the needs of others
- Respect for individual rights and democratic process
- Participation in community action
- Active participation in the school community

Process

Course time will be divided between:

- Off-campus participation in the activities of a particular community institution or agency.
- Class time devoted to:
 - (a) Developing an understanding of cultural self, family identity and connection to the community, places and religion
 - (b) The study of community structures and operations
 - (c) Reflection on placement experiences
 - (d) Work on assessment outcomes
 - (e) Practical project on campus
 - (f) Development of a health, strength and wellbeing program incorporating physical activity

Foundation Units

Foundation units will be offered where applicable to students at that level in preparation for intermediate participation. All subjects at Foundation level have the same title and is a pre-requisite for the higher level.

Year 11 Personal Development Skills incorporating Health, Strength and Wellbeing

This unit has the following outcomes:

- Plan and organise a complex activity
- Demonstrate self-management skills for goal achievement
- Demonstrate knowledge, skills and abilities in the context of an activity or project
- Describe leadership skills and responsibilities
- Utilise interpersonal skills to communicate ideas and information

Students undertake a Scope Young Ambassadors program. This incorporates Christian service.

This unit has the following outcomes:

- Identify planning and organisation skills relevant for the management of health or community service activities
- Demonstrate skills relevant to complex problem solving

Religious Education will have a large focus serving the local community through charitable work whilst also incorporating:

- Theology of the Body: Exploring ways to develop healthy relationships
- Understanding Religion in Our World: Exploring Christian and non-Christian faith
- Ethical Decision Making: Exploring contemporary ethical issues in society
- Building the Kingdom Through Social Justice: Exploring ethics through active Christian Service

Year 12 Personal Development Skills

The PDS Senior Unit 1 will be conducted over the first three terms of the year. The course builds on the skills developed in the Intermediate Units through practical activities which have a community service focus. A particular outcome of the course is the development of an awareness and understanding of cultural diversity in the community. Students will also have the opportunity to participate in some elements of the Year 12 R.E. elective program including:

- Within the Faith and Justice Unit, participating in the visiting program by supporting local communities
- Participation in personal development activities of the Term 3 Faith and Sexuality unit

Planning your VCAL Program

VCAL students are required to apply to participate in the VCAL program, which is followed up with an interview. Successful applicants are required to abide by the conditions outlined in the declaration they have signed. Successful applicants will be required to undertake the first unit of Work Related Skills prior to being eligible to commence placement.

To qualify for the award of VCAL you must complete a minimum of 1000 nominal hours of study during the year. This is typically made up of 10 semester length units each of 100 hours.

The program can lead to extensive pathways and can take various forms as outlined in these three options. Students may also be offered the opportunity to participate in RSA, RSF, RSG and Barista Training.

| Option One | Option Two – by negotiation | Option Three |
|--|---|---|
| Literacy | Personal Development Skills Literacy | Literacy |
| Numeracy | Numeracy | Numeracy |
| Work Related Skills | Work Related Skills | Work Related Skills |
| Personal Development Skills | Personal Development Skills | Personal Development Skills |
| VET Program Selected from the list of VET Certificates offered internally at Penola Catholic College – refer to this handbook in the Senior Programs section. For example, Retail Cosmetics and Salon Assistant, Certificate II in Business | School Based Apprenticeship Training Students must check the number of credits awarded through the SBAT and external VETs Note: There may be some cost for fees and equipment for students undertaking SBATS. | External VET For Example: <ul style="list-style-type: none"> • Building and Construction • Plumbing • Electrotechnology (Pre-App) |
| | External TAFE as individually negotiated. This may be completed in one-week blocks depending on your TAFE's requirements | A second VET ** or internal program as individually negotiated |
| Work Placement specific to the VET industry you are studying. | Work Placement specific to the VET industry you are studying. | Work Placement specific to the VET industry you are studying. |

VCE options for VCAL students may be possible by negotiation but must directly complement a VET program whilst not compromising other subjects.

**** VET courses** through Kangan or other TAFE institutes could be full or half day programs. These can have varying starting and finishing times, therefore students will be expected to be at Penola Catholic College when not at TAFE on these days. Programs such as Hospitality may go into the evening, so students must organize travel arrangements and must notify both TAFE and school of non-attendance.

Participation in College Events: On occasions, students will be required to participate in College activities on TAFE days. This will be pre-arranged, and the TAFE institutions will be informed, where work placement is affected students will be required to notify employers.

VCE Maths: In some circumstances, VCAL students may undertake General Maths-Further Units 1 & 2 as part of the VCAL Program. VCAL students will be required to attend a regular program during VCE exams.

Work Placement: Intermediate and Senior VCAL students must complete Work Placement. Students are to organise their own placements and have Work Placement Agreement Forms completed a minimum of 2 weeks prior to commencing their placements.

The VCAL Pathways Liaison will also assist students in completing their documentation prior to commencement of the placement.

VCAL Program First Year

| Strand | Semester 1 | Semester 2 |
|---|---|-----------------------------|
| Literacy Skills | VCAL Literacy | VCAL Literacy |
| Work Related Skills (WRS) | Work Related Skills (WRS) 1 | Work Related Skills (WRS) 2 |
| Personal Development Skills (RE) | VCAL PDS 1 | VCAL PDS 2 |
| VET Certificate | Your VET selections for Unit 1 & 2 | |
| Accreditation Students can elect to participate in the following - | Whitecard, Responsible Service of Gambling, Responsible Service of Food, Barista Training | |

VCAL Program Planning Second Year (Year 12)

| Strand | Semester 1 | Semester 2 |
|---|--|--|
| Literacy Skills | VCAL Literacy | VCAL Literacy |
| Numeracy Senior Skills (WRS) | VCAL Numeracy | VCAL Numeracy |
| Work Related Skills (WRS) | VCAL WRS 1 | VCAL WRS 2 |
| Personal Development Skills (including Religious Education) | VCAL Product Development Skills 1 | VCAL Product Development Skills 1 |
| VET Certificate | Your VET selections for Unit 1 & 2 | |
| Additional VET Selection or SBAT | Your VET Selection for Unit 3 or SBAT _____ | Your VET Selection for Unit 4 or SBAT _____ |
| Accreditation Students can elect to participate in the following - | White card, Responsible Service of Gambling, Responsible Service of Food, Barista Training | |

Religious Education

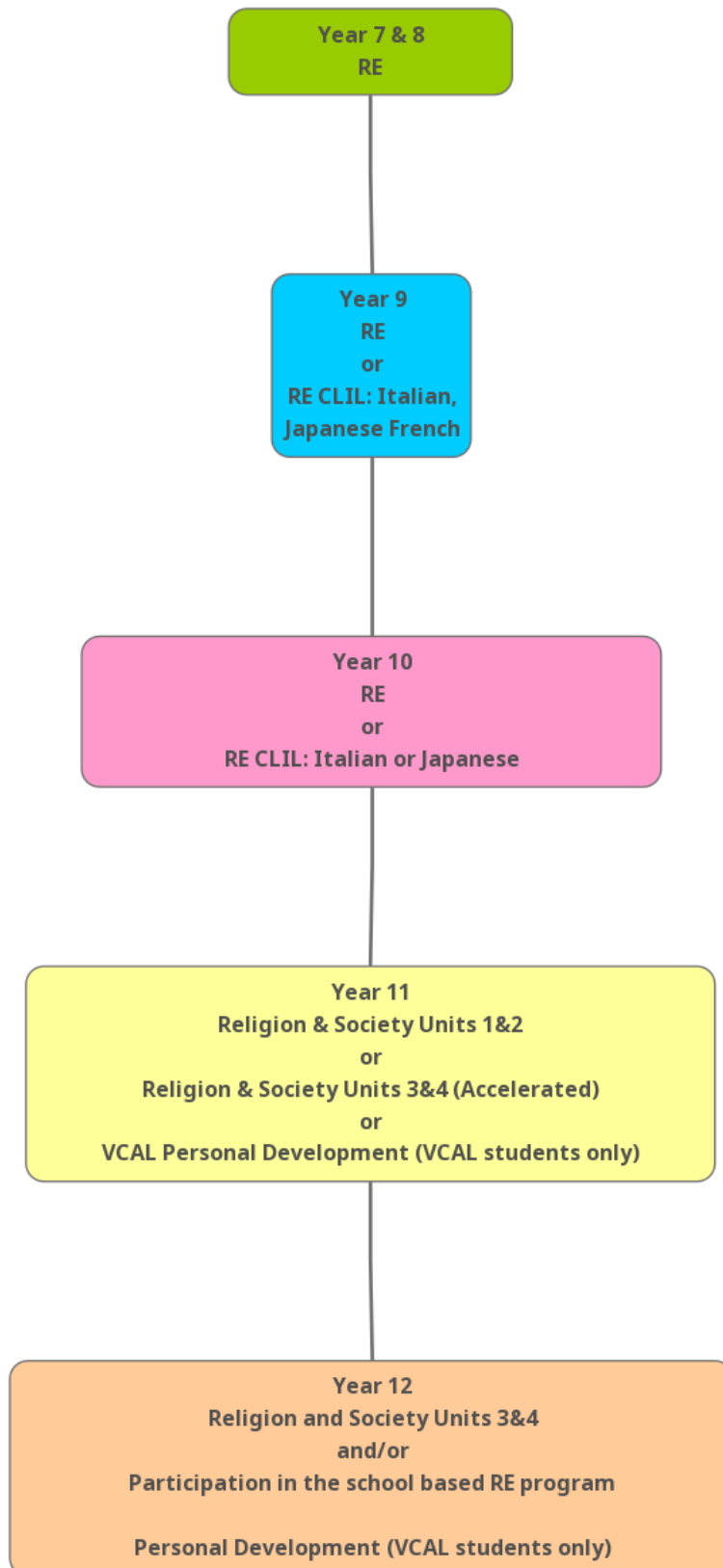
Year 7 - 10 Religion Education

VCE Religion and Society

Religious Education Year 12



Religious Education Pathways



Religious Education

Year 7 & 8

The program respects the Gospel vision of the whole person, the basic human need for salvation, and the interplay of God's revelation within the personal and social life of the individual. Consequently, the diversity of prior formation and dimensions of the student's faith is respected and nurtured within the context of our program. The Religious Education Program seeks to incorporate features of the Enhancing Catholic School Identity (ECSI) project to enable students to develop post-critical belief thinking skills, and to be active participants in the re-contextualisation of their faith.

It is anticipated students will reach Level 8 of Catholic Education Melbourne - Pedagogy of Encounter Framework. In reaching this level, student will have skills in each of the learning strands: Knowledge and Understanding, Reasoning and Responding; Personal and Communal Engagement. In addition, they will have developed knowledge and understanding related to each of the five content areas: Jesus and Scripture; Church and Community; God, Religion and Life; Prayer, Liturgy and Sacrament; Morality and Justice.

Year 7 - Religious Education

Students undertake four unit of study which explore the following guiding questions:

1. Do I belong?
2. How can looking back help us move forward?
3. Is there something about Mary?
4. What give us hope?

Students also engage in a range of additional experiences which complement the RE program:

- College Feast Day Celebrations
- Exploration of College Theme
- Regular 'Closer to God' lessons
- An annual Reflection Day experience
- Opportunities to engage prayer, Liturgies and Masses

Year 8 - Religious Education

Students undertake four unit of study which explore the following guiding questions:

- Is there still hope in the world?
- What tells me I belong?
- Who is this man Jesus anyway?
- Why to Christians do what they do?

Students also engage in a range of additional experiences which complement the RE program:

- College Feast Day Celebrations
- Exploration of College Theme
- Regular 'Closer to God' lessons
- An annual Reflection Day experience
- Opportunities to engage prayer, Liturgies and Masses

Religious Education

Year 9

The program respects the Gospel vision of the whole person, the basic human need for salvation, and the interplay of God's revelation within the personal and social life of the individual. Consequently, the diversity of prior formation and dimensions of the student's faith is respected and nurtured within the context of our program. The Religious Education Program seeks to incorporate features of the Enhancing Catholic School Identity (ECSI) project to enable students to develop post-critical belief thinking skills, and to be active participants in the re-contextualisation of their faith.

It is anticipated students will reach Level 9 of Catholic Education Melbourne - Pedagogy of Encounter Framework. In reaching this level students will be able to explain aspects of the Catholic Tradition. Students interpret their life in dialogue with the Catholic Tradition and the cultural context by critically evaluating differences in interpretation, demonstrating sensitivity to other points of view and openness to religious imagination. Students reflect on experiences that provoke spiritual and religious insights. They integrate new insights by revealing connections and disconnections between their personal stance and possible responses to cultural, historical and political issues.

Year 9 - Religious Education

Students undertake four unit of study which explore the following guiding questions.

1. Decision Making – Which way should I go?
2. Discipleship - Why should I respond
3. Stewardship - How should I treat my Home?
4. Christmas – Why should I celebrate?

Students also engage in a range of additional experiences which complement the RE program;

- College Feast Day Celebrations
- Exploration of College Theme
- Project Based Learning
- Regular 'Closer to God' lessons
- An annual Reflection Day experience
- Opportunities to engage prayer, Liturgies and Masses

RECLIL Italian/Japanese/French

"Content and Language Integrated Learning (CLIL) is offered to enhance language fluency in Italian and Japanese in year 9 using the content of Religious Education. Students study the mainstream units of year 9 RE as outlined in the mainstream curriculum with all lessons, assessment, and resources undertaken in the respective chosen language.



Religious Education

Year 10

The program respects the Gospel vision of the whole person, the basic human need for salvation, and the interplay of God's revelation within the personal and social life of the individual. Consequently, the diversity of prior formation and dimensions of the student's faith is respected and nurtured within the context of our program. The Religious Education Program seeks to incorporate features of the Enhancing Catholic School Identity (ECSI) project to enable students to develop post-critical belief thinking skills, and to be active participants in the re-contextualisation of their faith.

It is anticipated students will reach Level 10 of Catholic Education Melbourne - Pedagogy of Encounter Framework. Students will be able to explain the Catholic Tradition by making distinctions and connections between different perspectives from both within and external to the tradition. Students interpret their life in dialogue with the Catholic Tradition and the cultural context by unpacking the complexities of global issues using historical and future perspectives. Students reflect on experiences that provoke spiritual and religious insights by articulating the role of the inner voice and ways they attend to its formation. They integrate new insights by applying their personal stance to global trends and ethical issues.

Year 10 - Religious Education

Students undertake four unit of study which explore the following guiding questions.

- Unit 1: Identity - What makes me who I am?
- Unit 2: Relationships - What is Love?
- Unit 3: Social Justice - What is the purpose of my life
- Unit 4: Universal - What does it mean to be Catholic?

Students also engage in a range of additional experiences which complement the RE program;

- College Feast Day Celebrations
- Regular 'Closer to God' lessons
- An annual Reflection Day experience
- Opportunities to engage prayer, Liturgies and Masses

RE CLIL Italian/Japanese

Content and Language Integrated Learning (CLIL) is offered to enhance language fluency in Italian and Japanese in year 10 using the content of Religious Education. Students study the mainstream units of year 10 RE as outlined in the mainstream curriculum with all lessons, assessment, and resources undertaken in the respective chosen language.



VCE Religion & Society

VCE Religion and Society enables students to understand the complex interactions between religion and society over time. The study of Religion and Society can assist students in reaching a deeper, balanced understanding of societies and cultures in which multiple world views coexist. Students explore how such societies and their religious traditions negotiate significant ethical issues. Through the study of VCE Religion and Society students come to acknowledge the role of religion in shaping historical and present events. They explore times when religion dominated societies and the shifting role of religion in societies today in which religion, by some is perceived to play a lesser role in society. It is anticipated student will develop a capacity to understand and appreciate different faith perspectives while learning to deepen and nurture their own faith.

Unit 1 - The role of religion in society

In this unit students explore the origins of religions and the role of religions in the development of society, identifying the nature and purpose of religion over time. They investigate the contribution of religion generally to the development of human society. They also focus on the role of religious traditions over time in shaping personal and group identity. Students examine how individuals, groups and new ideas have affected and continue to affect religious traditions. The unit provides an opportunity for students to understand the complex relationships that exist between individuals, groups, new ideas and religious traditions.

Areas of Study include:

- The nature and purpose of religion
- Religion through the ages
- Religion in Australia

Unit 2 - Ethics and Morality

Choosing which values to live by in principle and in practice is fundamental to being human. This is a discipline that investigates the various methods for making ethical decisions; it involves reflection on what 'right' and 'wrong', and 'good' and 'bad' mean when applied to human decisions and actions. Ethics is concerned with discovering principles that guide practical moral judgment. Ethics is particularly concerned with the justification for moral choices - identifying the arguments and analysing the reasoning behind them. Ethical questions are raised at the personal, family, local, wider community, national and global level. In this unit, students survey various approaches to ethical decision-making and then explore at least two religious traditions in detail. They explore contemporary ethical issues in the light of their investigations into ethical decision making and ethical perspectives, and moral viewpoints in religious traditions. Students participate in a Christian Service Program which provides an opportunity for students to investigate ethical issues as part of their studies in this unit.

Areas of Study include:

- Ethical decision making and moral judgement
- Religion and ethics
- Ethical issues in society



Unit 3 The Search for Meaning

In this unit, students study the purposes of religion generally and then consider the religious beliefs developed by one or more than one religious tradition or denomination in response to the big questions of life. Students study how particular beliefs within one or more than one religious tradition or denomination may be expressed through the other aspects of religion and explore how this is intended to foster meaning for adherents.

Areas of Study include:

- Responding to the search for meaning
- Expressing meaning
- Significant life experiences, religious beliefs and faith

Unit 4 Religion, Challenge and Change

This unit focuses on the interaction over time of religious traditions and the societies of which they are a part. For a large part of human history religion has been a truth narrative, offering a means for finding answers to the big questions of life. Religious traditions are in a dynamic process of engagement and negotiation with members individually and collectively, as well as with other key institutions in wider society associated with power, authority and credibility. In this unit, students explore challenges that religious traditions have face in the past and in more recent times.

Areas of Study include:

- Challenge and response
- Interaction of religion and society



VCE Religious Education

All students in year 12 are required to undertake the College-based program of Religious Education. This program is outlined below:

Unit 1 - Faith and Film

This unit uses the medium of film as an avenue for reflection upon the meaning and truth of the Christian faith which stems from the Gospel accounts of the life, death and resurrection of Jesus.

The unit will challenge students to think critically about film from a variety of theoretical and theological perspectives. A combination of film screenings and the use of reflection and discussion questions on themes in the films will be utilised to enhance the learning experience and opportunities to further develop and enrich the personal faith perspectives of students.

Unit 2 - Electives

Each year, the electives offered in this program vary subject to student and teacher interest in elective options. Students will choose from units such as:

- Faith & Social Justice
- Faith & Happiness
- Faith & Meditation
- Faith & Science
- Faith & Sacred Art
- Faith & Drama
- Faith & Music
- Faith & Business Ethics
- Faith & Social Justice
- Faith & The Big Life Questions
- Faith & The Search for Meaning

Unit 3 - Theology of the Body

The program consists of a series of presentations linked to Saint John Paul II's Theology of the Body. "Theology of the Body" is St. John Paul II's integrated vision of the human person.

The human body has a specific meaning, making visible an invisible reality, and is capable of revealing answers regarding fundamental questions about us and our lives:

John Paul II encourages a true reverence for the gift of our sexuality and challenges us to live it in a way worthy of our great dignity as human persons.

His theology is not only for young adults or married couples, but for all ages and vocations, since it sums up the true meaning of being a person.

Theology of the Body assists us to address various questions we may ask ourselves such as....

- What does the marital union of a man and woman say to us about God and his plan for our lives?
- What is the purpose of the married life?
- What is the impact of social media and pornography on healthy relationships and sexuality?



English

English

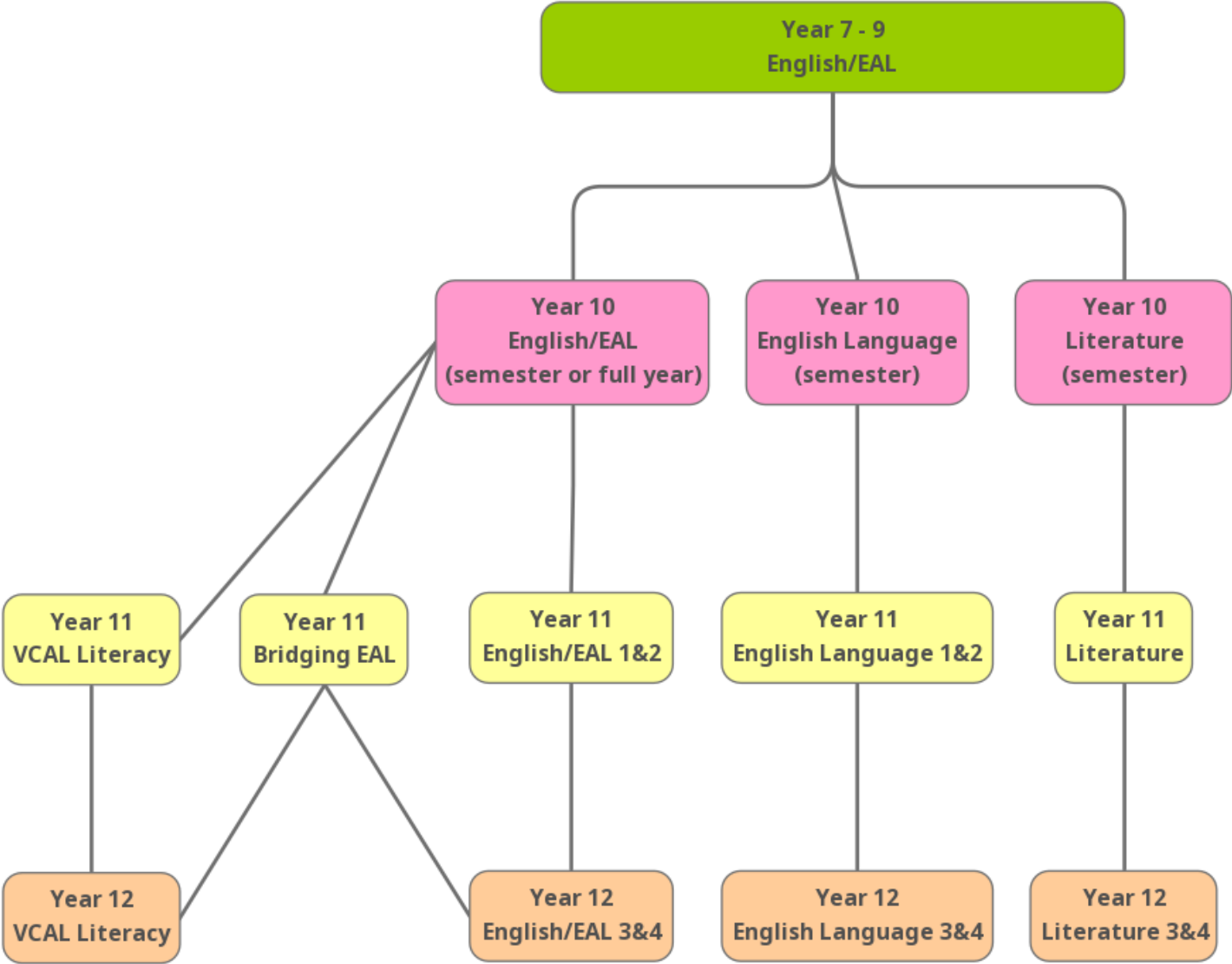
English as an Additional Language (EAL)

English Language

Literature



English Pathways



English

Year 7 - 8

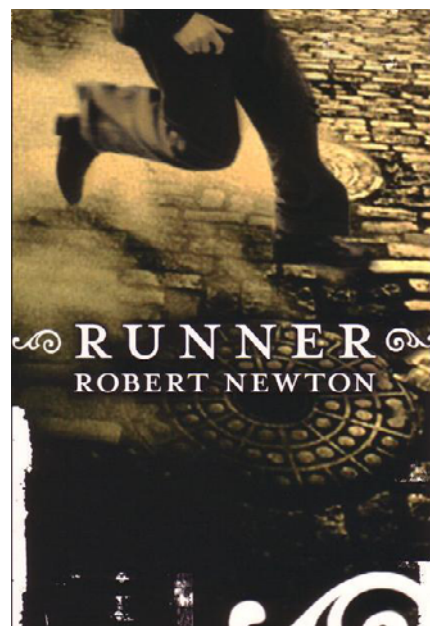
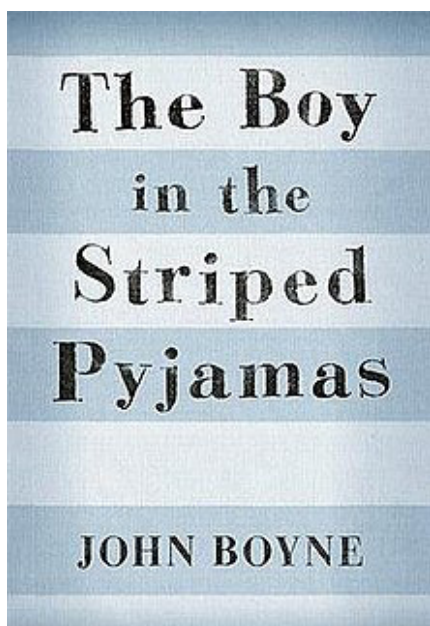
In Years 7 and 8, students learn to engage with a variety of texts that are designed to inform and persuade. They learn to read, view, evaluate and perform a range of spoken, written and multimodal texts. These texts include various types of media texts, early adolescent novels, poetry, films, non-fiction texts and dramatic performances. A major focus in Years 7 and 8 is on the development of fundamental literacy skills that will be built on as students progress through the English curriculum in their secondary education. At Penola Catholic College, we aim to develop students' reading skills to make them effective and life-long lovers of reading. Students in both Years 7 and 8 participate in the Renaissance wider reading program, which monitors their development and encourages reading beyond the classroom.

Year 7 - English

- Myths and Legends
- Persuasive Writing
- 'The Boy In The Striped Pyjamas' (novel study)
- 'Holes' (EAL only)

Year 8 - English

- Poetry
- Persuasive Writing
- 'Runner' (novel study)
- 'Paper Planes' (film study)
- 'The Happiest Refugee' (EAL only)



English

Year 9

In Year 9, students consolidate and develop their knowledge and usage of English skills taught in the junior years. Studying texts including early adolescent novels, film texts, media issues and a variety of textual genres, students are engaged in a process of learning to comprehend, compare and respond to texts in increasingly complex ways.

Year 9 - English

- 'Loyal Creatures' (novel study)
- 'Lion' (novel study – EAL only)
- 'Is Australia Fair?' (PBL unit)
- 'The Hunger Games' (comparative study)
- Analysing Argument



English/EAL

Year 10

The Year 10 English program is designed to equip students with the skills and knowledge they require in order to be prepared for their senior English pathways. The subjects offered prepare students for all streams of English offered in the VCE and VCAL programs. All students are required to undertake English for the entire year. A mainstream course of study will be available all year for students who wish to continue the English pathway begun in Years 7-9. In addition, students have the opportunity to complete a semester of Year 10 Literature and/or Year 10 English Language. These elective units are designed to give students a taste of the additional VCE English options available to them in Years 11 and 12, and to provide additional choice for students who enjoy and excel in English.

Mainstream English - all students Semester 1

The mainstream English course will be available in two semester units. One unit will be compulsory for all Year 10 students, ensuring that they develop the skills required for VCE English/EAL that is undertaken by the majority of VCE students. A second semester unit will be available for those who choose to continue mainstream English in Semester Two. Different texts will be studied in each unit to cater for students who continue in this course for the duration of the year.

Year 10

Mainstream - Compulsory Semester 1

- 'The Story of Tom Brennan' (novel study)
- Analysing and Presenting Argument

Mainstream - Elective Semester 2

- 'Romeo and Juliet'
- War poetry

EAL English - EAL students Semester 1 and 2

The EAL English course is compulsory for all Year 10 EAL students for the entire year, ensuring that they develop the skills required for VCE English/EAL. Students study a variety of topics and skills throughout the year as outlined below.

Year 10 EAL

- 'The Barrio Kings' (novel study)
- Analysing and Presenting Argument
- 'Romeo and Juliet'
- War poetry

English Language - Semester 2 elective

English Language is the study of language and is aimed at finding out what language is like and why. The English language is a rich and textured system, with its own sounds, its own grammar, and its own identity and style. Year 10 English Language will provide students with an introduction to the vocabulary used to analyse language in a linguistic way (metalanguage) and explore aspects such as history, grammar and language use within society. The opportunity to take part in English Language will assist students in making their decision about their English 'stream' in Years 11 and 12.

Literature - Semester 2 elective

Year 10 Literature will provide students with a deeper understanding of the literary skills required when studying texts, poems, plays and film. Through the study of various literary genres, students will be exposed to more specific teaching of theme and character analysis, authorial views and values, historical context and critical analysis skills. Students will be challenged to question literary texts and discuss various elements with their peers and teacher. The opportunity to take part in Literature will assist students in making their decision about their English 'stream' in Years 11 and 12.

Texts studied:

- 'Minimum of Two' (short stories)
- 'Of Mice and Men' (novella/film)

VCE English

The study of English or EAL is designed to facilitate an understanding and appreciation of social views and values through the study of the English language. This enables students to develop their critical understanding and control of the English language so that they can use it in a wide range of situations, ranging from personal and informal to more public occasions, and to develop a level of competence adequate for the demands of post-school education, further education, and participation in a democratic society. Students will read and respond to texts analytically and creatively. They will analyse arguments and the use of persuasive language in texts, and create their own texts intended to position audiences. They develop their skills in creating written, spoken and multimodal texts, and well as justifying the language choices made in constructing these texts.

Reading and creating texts - Units 1 and 3

In this area of study students explore how meaning is created in a text. Students identify, discuss and analyse decisions authors have made. They explore how authors use structure, conventions and language to represent characters, settings, events, explore themes, and build the world of the text for the reader. Students investigate how the meaning of a text is affected by the contexts in which it is created and read. They respond to literary texts through the production of both analytical and creative extended responses.

Reading and comparing texts - Units 2 and 4

In this area of study, students explore how comparing texts can provide a deeper understanding of ideas, issues and themes. They investigate how the reader's understanding of one text is broadened and deepened when considered in relation to another text. Students explore how features of texts, including structures, conventions and language, convey issues, ideas and themes that reflect and explore the world and human experiences, including historical and social contexts. Students practise their listening and speaking skills through discussion, developing their ideas and thinking in relation to the texts studied.

Analysing and presenting argument - Units 1-4

In this area of study, students focus on the analysis and construction of texts that attempt to influence an audience. Students read a range of texts that attempt to position audiences in a variety of ways. They explore the use of language for persuasive effect and the structure and presentation of argument. They consider different types of persuasive language, including written, spoken, and visual, and combinations of these, and how language is used to position the reader. Students display their ability to both analyse the argument of others, as well as create their own argumentative texts. They respond in both written and oral modes across the four VCE units.

Listening to texts (EAL only) – Unit 3

In this area of study, students develop and refine their listening skills. They listen to a range of spoken texts and use active listening strategies to understand information, ideas and opinions presented in texts. Listening skills are developed in the context of Areas of Study 1 and 2, and specific speaking and listening activities.



VCE English Language

VCE English Language explores the ways in which language is used by individuals and groups and reflects our thinking and values. Learning about language helps us to understand ourselves, the groups with which we identify and the society we inhabit. English Language builds on students' previous learning about the conventions and codes used by speakers and writers of English. Informed by the discipline of linguistics, it provides students with metalinguistic tools to understand and analyse language use, variation and change. Students studying English Language examine how uses and interpretations of language are nuanced and complex rather than a series of fixed conventions. Students explore how people use spoken and written English to communicate, to think and innovate, to construct identities, to build and interrogate attitudes and assumptions and to create and disrupt social cohesion. The study of English Language enables students to understand the structures, features and discourses of written and spoken texts through the systematic and objective deconstruction of language in use.

Unit 1 - Language and communication

Language is an essential aspect of human behaviour and the means by which individuals relate to the world, to each other and to the communities of which they are members. In this unit, students consider the way language is organised so that its users have the means to make sense of their experiences and to interact with others. Students explore the various functions of language and the nature of language as an elaborate system of signs. The relationship between speech and writing as the dominant modes of language and the impact of situational and cultural contexts on language choices are also considered. Students investigate children's ability to acquire language and the stages of language acquisition across a range of subsystems.

Areas of Study include:

- The nature and functions of language
- Language acquisition

Unit 2 - Language change

In this unit, students focus on language change. Students consider factors contributing to change over time in the English language and factors contributing to the spread of English. They explore texts from the past and from the present, considering how all subsystems of the language system are affected. Attitudes to language change vary considerably and these are also considered. In addition to developing an understanding of how English has been transformed over the centuries, students explore the various possibilities for the future of English. They consider how the global spread of English has led to a diversification of the language and to English now being used by more people as an additional or a foreign language than as a first language. Contact between English and other languages has led to the development of geographical and ethnic varieties, but has also hastened the decline of indigenous languages. Students consider the cultural repercussions of the spread of English.

Areas of Study include:

- English across time
- Englishes in contact

Unit 3 - Language variation and social purpose

In this unit students investigate English language in contemporary Australian social settings, along a continuum of informal and formal registers. They consider language as a means of social interaction, exploring how through written and spoken texts we communicate information, ideas, attitudes, prejudices and ideological stances. Students examine the stylistic features of formal and informal language in both spoken and written modes. They learn how to describe the interrelationship between words, sentences and text as a means of exploring how texts construct message and meaning. Students consider how texts are influenced by the situational and cultural contexts in which they occur. Students learn how speakers and writers select features from within particular stylistic variants, or registers, and this in turn establishes the degree of formality within a discourse. They learn how language can be indicative of relationships, power structures and purpose through the choice of a particular variety of language and through the ways in which language varieties are used in processes of inclusion and exclusion.

Areas of Study include:

- Informal language
- Formal language

Unit 4 - Language variation and identity

In this unit students focus on the role of language in establishing and challenging different identities. There are many varieties of English used in contemporary Australian society, including national, regional, cultural and social variations. Standard Australian English is the variety that is granted prestige in contemporary Australian society and it has a role in establishing national identity. However, non-Standard English varieties also play a role in constructing users' social and cultural identities. Students examine a range of texts to explore the ways different identities are constructed. Students explore how our sense of identity evolves in response to situations and experiences and is influenced by how we see ourselves and how others see us. Through our language we express ourselves as individuals and signal our membership of particular groups. Students explore how language can distinguish between 'us' and 'them', creating solidarity and reinforcing social distance.

Areas of Study include:

- Language variation in Australian society
- Individual and group identities



VCE Literature

VCE Literature focuses on the meaning derived from texts, the relationship between texts, the contexts in which texts are produced and read, and the experiences the reader brings to the texts. Students undertake close reading of texts and analyse how language and literary elements and techniques function within a text. Emphasis is placed on recognition of a text's complexity and meaning, and on consideration of how that meaning is embodied in its literary form. The study provides opportunities for reading deeply, widely and critically, responding analytically and creatively, and appreciating the aesthetic merit of texts. VCE Literature enables students to examine the historical and cultural contexts within which both readers and texts are situated. It investigates the assumptions, views and values which both writer and reader bring to the texts and it encourages students to contemplate how we read as well as what we read. It considers how literary criticism informs the readings of texts and the ways texts relate to their contexts and to each other. Accordingly, the texts selected for study are drawn from the past through to the present, and vary in form and social and cultural contexts.

Unit 1 - Approaches to literature

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

Areas of Study include:

- Reading practices
- Ideas and concerns in texts

Unit 2 - Context and connections

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

Areas of Study include:

- The text, the reader and their concerns
- Exploring connections between texts



Unit 3 - Form and transformation

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

Areas of Study include:

- Adaptations and transformations
- Creative responses to texts

Unit 4 - Interpreting texts

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

Areas of Study include:

- Literary perspectives
- Close analysis



VCE Bridging EAL

Year 11

Bridging English as an Additional Language (BEAL) is the intensive and explicit study of English language in a range of socio-cultural contexts and for a range of purposes, including further education and the workplace. Students develop their language skills and confidence, assisting them to communicate effectively in a range of contexts, including academic, using a range of registers of spoken and written English. This contributes to students being able to participate effectively in Australian life.

Selection: This program is taken in addition to the mainstream English curriculum. Students would either need to be selected or apply to be able to enrol in this subject. The course may be suited to students with interrupted education, those with limited exposure to an English language learning environment, and students from non-English speaking backgrounds who are identified as benefiting from a program which is designed to support the building of academic English knowledge and skills. There is no presumption that students undertaking this study will be eligible for EAL at Units 3 and 4.

Units 1 and 2

In this unit, students build their understanding of how spoken and written English is used to communicate effectively in a variety of contexts and for a range of purposes. Students develop the ability to listen, speak, read and write for academic purposes. They explore how language features, structures and conventions can be used to express ideas and opinions, and to create their own spoken and written texts at increasing levels of complexity.

On completion of this unit, the student should be able to explain how a variety of media texts position audiences, and produce texts which attempt to position audiences. Further, students should be able to understand and respond to literary texts, and create their own literary texts in response to, or in the style of, a text studied.

Areas of Study include:

- English for everyday and academic purposes
- English for self-expression



Mathematics

Year 7 - 10 Mathematics

Mathematical Methods

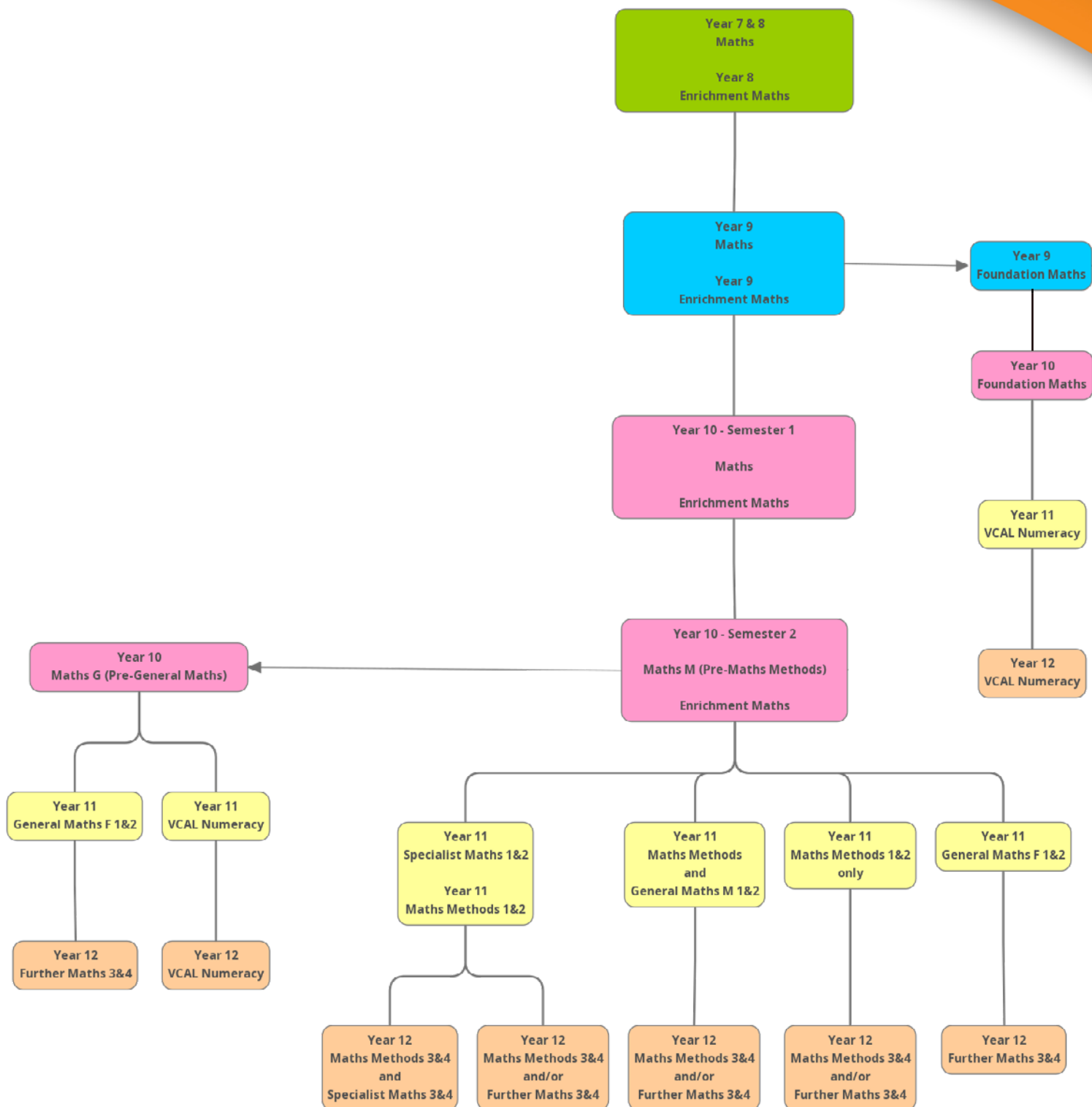
General Mathematics

Specialist Mathematics

Further Mathematics



Mathematics Pathways



Mathematics

Year 7 - 8

Mathematics at Penola Catholic College provides access to worthwhile and challenging Mathematical learning in a way that considers the needs and aspirations of a wide range of students. It is designed to promote student awareness of the importance of Mathematics in everyday life in an increasingly technological society and confidence in making effective use of their mathematical knowledge and skills.

The purpose of each Mathematics unit is to consolidate basic mathematical skills and further develop these to confidently approach more complex mathematics and problem-solving activities and hence develop confidence in applying such techniques to the real world.

Year 7 Mathematics - Semester 1 Topics:

- Whole Numbers
- Number Properties
- Measurement
- Geometry and Polygons

Year 7 Mathematics - Semester 2 Topics:

- Fractions and Percentages
- Decimals
- Algebra
- Equations

Year 8 Mathematics - Semester 1 Topics:

- Integers
- Measurement
- Fractions, Decimals and Percentages
- Ratios and Rates

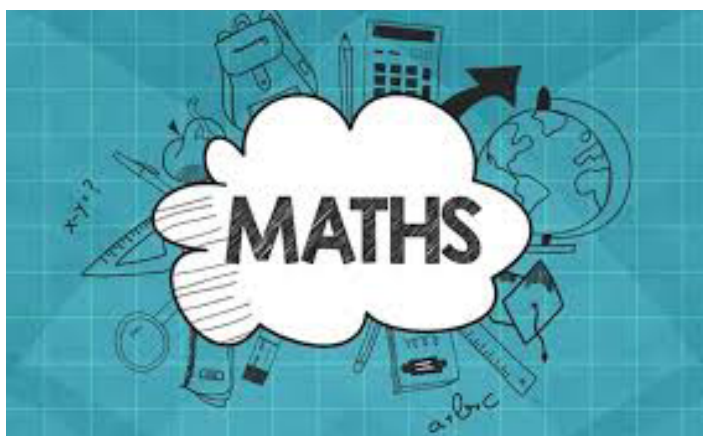
Year 8 Mathematics - Semester 2 Topics:

- Algebra
- Equations
- Straight Line Graphs
- Probability and Statistics

Year 8 Enrichment Mathematics

Enrichment Mathematics covers the same topics as mainstream Mathematics, but students are given the opportunity to maximize their learning potential by attempting more challenging problems and tasks that explore new, different and more complex Mathematical concepts.

Students will be invited each semester to be part of this program.



Mathematics

Year 9

Each semester students in Year 9 will study one of the following units:

- Year 9 Mathematics
- Year 9 Enrichment Mathematics
- Year 9 Foundation Mathematics

The purpose of each unit is to:

- Develop students' knowledge and skills in the topics listed
- Consolidate and extend on students' knowledge and skills from previous year's topic
- Develop students' skills to confidently approach more complex mathematics, problem-solving activities and investigative projects
- Enable students to apply relevant techniques to the real world

Year 9 Mathematics - Semester 1 Topics:

- Pythagoras
- Algebra
- Probability and Statistics
- Measurement

Year 9 Mathematics - Semester 2 Topics:

- Linear Relations
- Trigonometry
- Financial Maths
- Geometry

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Year 9 Enrichment Mathematics

Enrichment Mathematics covers the same topics as mainstream Mathematics, but students are given the opportunity to maximize their learning potential by attempting more challenging problems and tasks that explore new, different and more complex Mathematical concepts.

Students will be invited each semester to be part of this program.

Year 9 Foundation Mathematics

Foundation Mathematics is a practical study of Mathematics in the real world. It is designed for those students who have experienced difficulty in their study of Mathematics. Classes in this subject are limited to 15 students to increase teacher access time for students.

These students will not continue to study Mathematics at the VCE level.

Students will be invited to join the Year 9 Foundation Maths class by teachers in consultation with the Assistant Head of Mathematics, Student Services and parents/guardians.

Semester 1 Topics

- Working with numbers
- Measurement 1
- Shapes and Angles
- Statistics

Semester 2 Topics

- Measurement 2
- Financial Maths
- Pythagoras
- Trigonometry

Mathematics

Year 10

In Semester One students will study one of the following:

- Year 10 Mathematics
- Year 10 Enrichment Mathematics
- Year 10 Foundation Mathematics

In Semester Two students will study one of the following:

- Year 10 Mathematics M (pre-Methods)
- Year 10 Mathematics G (pre-General)
- Year 10 Enrichment Mathematics (pre-Methods)
- Year 10 Foundation Mathematics

Year 10 Mathematics

The mainstream study of Mathematics enables students to choose any of the available options in the study of Mathematics offered at Penola Catholic College at Year 11. It is expected that most students will complete this option.

Semester 1 Topics:

- Measurement
- Algebra
- Linear Relations
- Trigonometry

Semester 2 Pathways

At the end of Semester 1, based on their semester 1 results, students will be nominated by their Maths teacher for either 10 Maths M or 10 Maths G.

10 Maths M is designed to prepare students for Year 11 Maths Methods.

10 Maths G is designed to prepare students for Year 11 General Maths F.

Semester 2 Topics

Year 10 M:

- Quadratic Functions
- Probability
- Surds and Indices
- Advanced Algebra

Year 10 G:

- Statistics 1
- Consumer Maths
- Statistics 2
- Geometry and Trigonometry



Year 10 Foundation Mathematics

Foundation Mathematics is a practical study of Mathematics in the real world. It is designed for those students who have experienced difficulty in their study of Mathematics. Classes in this subject are limited to 15 students to increase teacher access time for students.

These students will not continue to study Mathematics at the VCE level.

Students will be invited to join this class by Year 9 Maths teachers in consultation with the Head of Mathematics, Student Services and the student's parents/guardians.

Semester 1 Topics:

- Measurement 1
- Consumer Maths 1
- Geometry
- Probability

Semester 2 Topics:

- Measurement 2
- Consumer Maths 2
- Using Data
- Trigonometry



VCE Mathematics

Mathematical Methods Units 1 and 2

These units are designed to prepare students for Maths Methods 3 & 4 and later for tertiary studies including most Science or Economics Courses.

Although it is possible to prepare for Maths Methods 3 & 4 by studying only Maths Methods Units 1 & 2, a much firmer basis for study is obtained by also studying General Mathematics.

Studying Maths Methods Units 1 & 2 only in Year 11 is not normally recommended but may be suitable for students who have achieved an average B grade in Year 10 Mathematics and who have space for only one Mathematics subject in their Year 11 course.

Unit 1 Topics:

- Quadratic Functions
- Probability
- Cubic and Quartic functions
- Rates of Change

Unit 2 Topics:

- Logarithmic and Exponential Functions
- Calculus
- Circular functions
- Advanced functions

Mathematical Methods Units 3 and 4

These units follow on directly from Mathematical Methods 1 & 2. They are intended to provide a suitable foundation for tertiary studies including most Science and some Commerce courses.

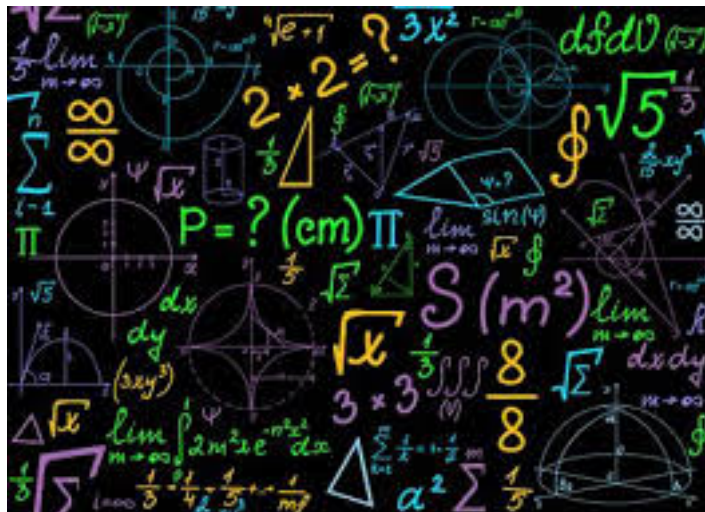
Students may take these units on their own or with either Further Mathematics 3 & 4 or Specialist Mathematics 3 & 4.

Unit 3 Topics:

- Polynomial Functions
- Exponential and Logarithmic Functions
- Circular Functions
- Transformations of functions
- Differentiation
- Applications of Differentiation

Unit 4 Topics:

- Integral Calculus
- Discrete Random Variables
- Continuous Random Variables
- Sampling and Estimation



General Mathematics (M) Units 1 and 2

These units must be taken in conjunction with Maths Methods 1 & 2.

Together with Maths Methods 1 & 2, they are designed to prepare students for Maths Methods 3 & 4 and/or for Further Maths 3 & 4.

Unit 1 Topics:

- Linear Equations
- Data Distributions
- Measurement
- Linear Graphs

Unit 2 Topics:

- Matrices
- Trigonometry
- Data Relationships
- Number Patterns and Recursion

General Mathematics (F) Units 1 and 2

These units are designed as preparation for Further Maths 3 & 4 and later for some Tertiary or TAFE courses (generally non-science studies) and to prepare students for employment.

Unit 1 Topics:

- Measurement
- Arithmetic Techniques
- Data Distributions
- Financial Maths

Unit 2 Topics:

- Trigonometry
- Data Relationships
- Matrices
- Number Patterns and Recursion

Further Mathematics Units 3 and 4

These units are designed to follow on directly from General Mathematics 1 & 2. They are intended to provide a broad base of Mathematical experience which is considered suitable for employment or tertiary studies where mathematics is a supporting subject but not the main focus of the course.

Students may take these units on their own or with Mathematical Methods 3 & 4.

Unit 3 Topics

- Core: Data Distributions
- Core: Data Relationships
- Core: Time Series Data
- Core: Recursion and Financial Modelling

Unit 4 Topics

- Module: Matrices
- Module: Geometry and Measurements

Specialist Mathematics Units 1 and 2

These units must be taken in conjunction with Maths Methods 1 & 2.

Together with Maths Methods 1 & 2 they are designed to prepare students for all Year 12 Maths, in particular, Maths Methods 3 & 4 and Specialist Maths 3 & 4, and later for tertiary studies including Mathematics and Engineering.

Unit 1 Topics

- Algebra Techniques
- Applications of Trigonometry
- Complex Numbers
- Vectors

Unit 2 Topics

- Graphing Techniques
- Kinematics and Statics
- Advanced Algebra
- Further Trigonometry

Specialist Mathematics Units 3 and 4

These units are designed to prepare students for tertiary courses in Mathematics and Engineering.

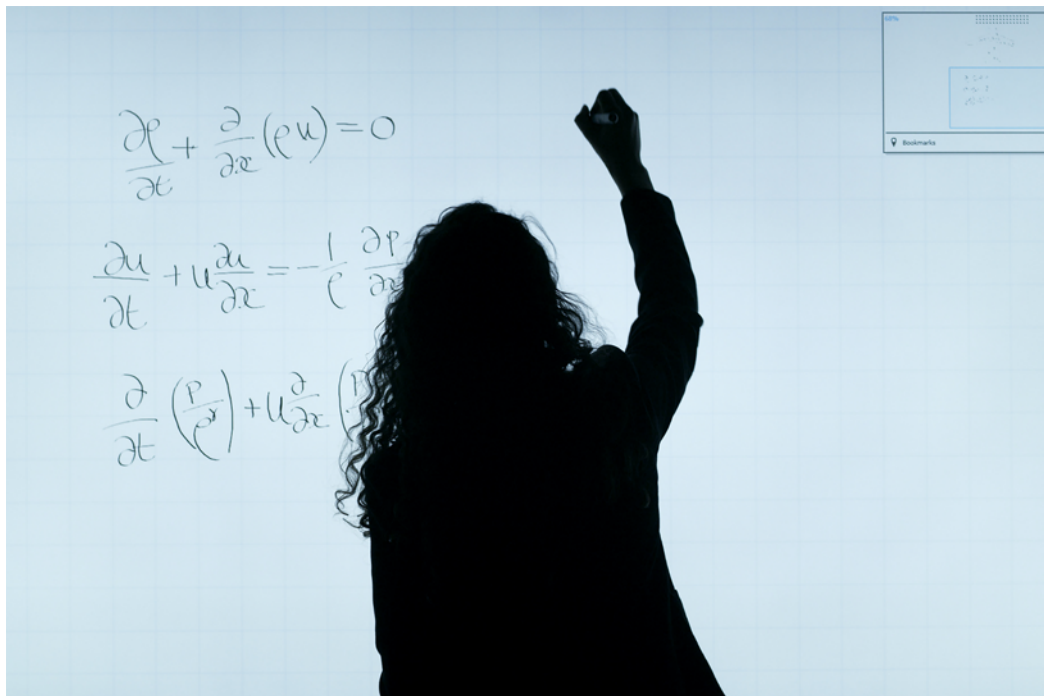
Students must take these units in conjunction with Mathematical Methods 3 & 4.

Unit 3 Topics

- Vectors
- Complex Numbers
- Circular Functions
- Sketch Graphs
- Techniques of Integration
- Applications of Integration

Unit 4 Topics

- Differential Equations
- Kinematics
- Vector Calculus
- Dynamics
- Sampling



Arts: Performing

Dance

Drama

Music

Music Performance

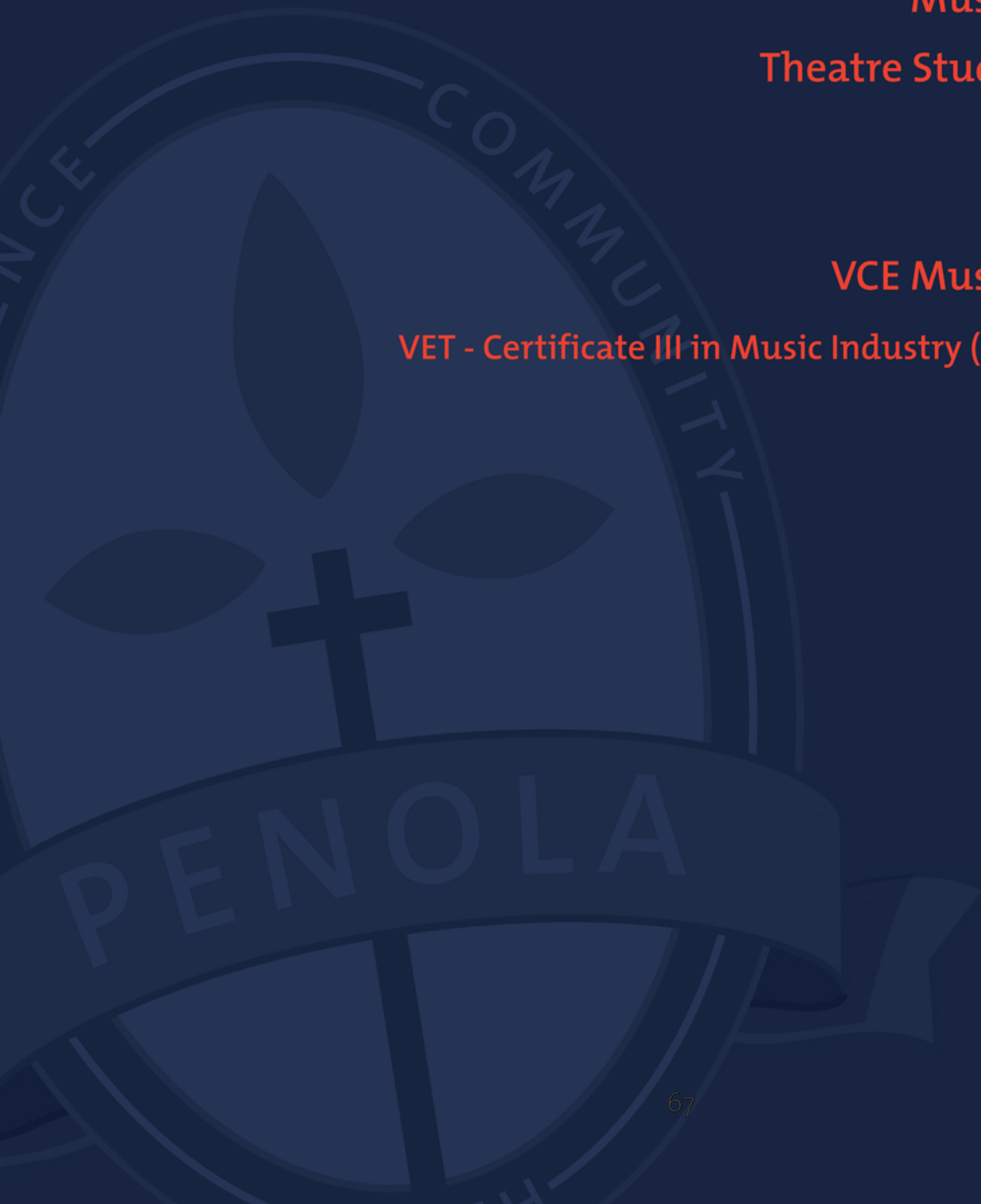
Theatre Studies and Design

VCE Dance

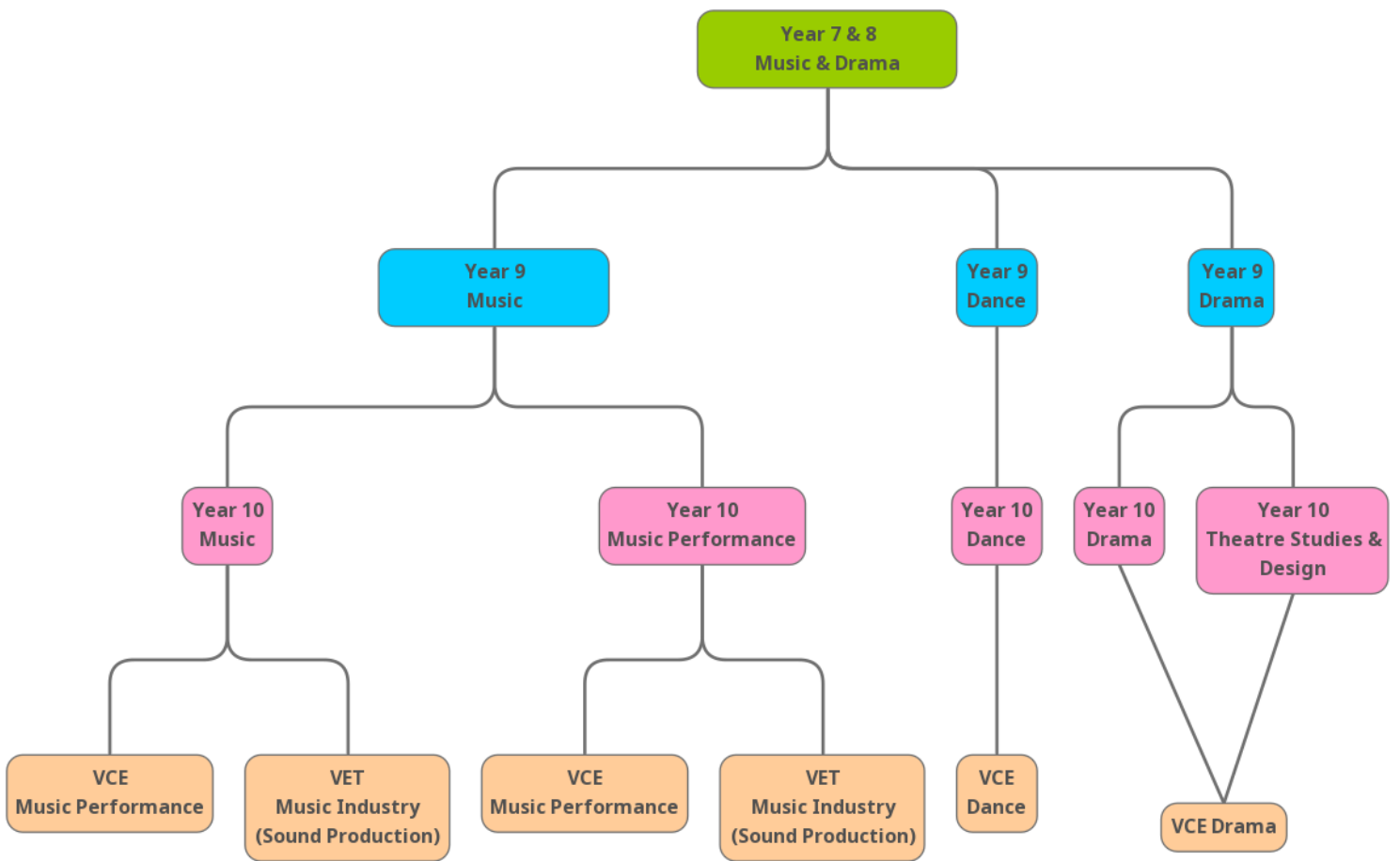
VCE Drama

VCE Music Performance

VET - Certificate III in Music Industry (Sound Production)



The Performing Arts Pathways



The Performing Arts

Year 7 & 8

The Performing Arts has always been an integral part of all cultures, no matter the time or place. At Penola, our Performing Arts subjects provide the foundations to 'performing' so that students can develop effective techniques and skills to communicate, as well as elicit an emotional response from an audience.

Our Junior Performing Arts courses are highly engaging. Students undertake a compulsory semester of Music and Drama in both Year 7 and Year 8. They develop an appreciation of music and drama as aural, visual and physical art forms as well as an understanding of how the performing arts contributes to society and culture. Students develop skills in performing, composing, listening and responding to music and drama works.

Year 7 Music

In Year 7 Music, all students learn to play a woodwind or brass instrument and undertake this study in a concert band setting. They learn to read, notate and analyse music notation using traditional as well as digital processes. Year 7 students experience performance, composition and music analysis, as well as respond to music in both visual and aural forms. The semester ends with a formal Concert Band performance in our Mary MacKillop Auditorium.

Year 7 Drama

In Year 7 Drama, there are two main units of work - Mime and Movement and Storytelling. Through various class activities, students develop skills and techniques in these drama genres. Students develop their interpersonal skills, critical thinking, imagination and creativity.

Year 8 Music

Rock Band is the focus in Year 8 Music. Students explore and develop their performance skills on several rock instruments including drum kit, guitar, bass guitar, keyboard, voice and ukulele. In Year 8 Music, students continue building their performance, composition and music analysis skills. Music vocabulary is further developed through guided listening sessions and students respond to music via whole class, small group and individual activities.

Year 8 Drama

The Year 8 Drama course continues the development of acting skills with a focus on Improvisation and Comedy. Students continue building their acting and analytical skills through various means including participating in small student-directed works and viewing live and pre-recorded performances.



The Performing Arts

Year 9

Dance, Drama and Music are the three elective Performing Arts subjects in Year 9. There are no formal requirements for entry into these Performing Arts subjects.

In Year 9 Dance, students develop an understanding of the elements of dance. They develop safe dance practices and habits and explore different dance styles and genres. In Drama, students develop an understanding of how voice and movement can be used to communicate to an audience. In Year 9 Music, students create, practice and perform music. They compose, interpret, listen and respond to music and develop their music language for analysis, composition and performance.

Performance is a component to all three subjects and students develop skills and techniques to effectively communicate to an audience. They perform works of others as well as student created works.

Year 9 Dance

In Year 9 Dance students study both conventional and creative/cultural dance techniques. They review and create dance routines including routines for warm up and body alignment. Students undertake tasks in choreography, dance styles and costume design. Students analysis both live and pre-recorded performances to develop an appreciation of good structure and the skilful uses of dance elements and principles.

Year 9 Music

The Year 9 Music course continues to build on the skills and techniques developed in the Junior years. Students can focus their performance skills on one instrument or continue developing their skills on several musical instruments. Instrument choices include guitar, bass guitar, drum kit, voice, ukulele and keyboard. Students undertaking private instrumental lessons may choose to make this instrument their focus or opt to learn another instrument. In Year 9 Music, students develop understanding and application of theoretical concepts. They learn about various styles of contemporary and world music and develop their critical thinking through listening and responding tasks.

Year 9 Drama

The focus of Year 9 Drama is to build confidence in the art of Improvisation. Through class activities, professional and pre-recorded performances, students explore how individual performers function within a group context and how these characters can be created and presented. During this course, students devise their own performances as well use scripted works. Different types of performance styles are explored and analysed with a focus on storytelling and creation of characters. Through advanced improvisation, theatre sports and role play, students expand their expressive and stage craft skills.



The Performing Arts

Year 10

The Performing Arts develops several important life skills including - teamwork, presentation, analytical, creative and problem-solving skills. In Year 10, students have the opportunity to study Dance, Drama and Music. There are no formal requirements for entry into these Year 10 Performing Arts subjects.

In Dance, Drama and Music, students create, practice, perform, interpret and respond. They begin developing subject specific language to effectively analyse a range of works and develop skills at effectively communicating to an audience. Students develop critical and analytical skills and learn to adapt and interpret when responding to the works of others. Performance is a large component to Year 10 Dance, Drama and Music and students will continue to build their confidence in the basic principles of solo and ensemble performance.

Year 10 Dance

In Year 10 Dance, students study conventional and creative/cultural dance techniques, including routines for developing strength, endurance and flexibility. They undertake tasks in choreography, dance styles and costume design. There is the opportunity for solo/group performances and the ability to access a range of techniques for more advanced students. Professional performances will be attended to analyse and to aid in the preparation of dance elements and principles.

Year 10 Drama

In this semester-based subject, students examine and observe a range of dramatic styles. The focus of this subject is extending expressive skills using the concepts and conventions of storytelling and character creation. The course includes improvisation and group devised and scripted performances, as well as opportunities for solo performance. Students see a live theatrical performance with the purpose of studying drama concepts and performance structure and form.

Year 10 Music (Semester only)

There are two music subjects on offer in Year 10 - Music (semester) and Music Performance (yearlong). Students continue developing their understanding of Music through performance, composition and analysis. Students will focus on various 20th Century music genres including Film Music and Popular Music. Students analyse scenes from films and reflect on how music plays a critical role in movies by enhancing the scene and connecting with the emotions of the audience. Sound Production is also explored in this subject. In Year 10 Music, students are encouraged to focus on a chosen principal instrument.

Year 10 Music Performance (Yearlong)

This yearlong course focuses on a deeper understanding of music. Students analyse various 20th Century music genres including Film Music, Musical Theatre and Popular Music. Sound Production is also explored in this subject. Compositional techniques are investigated, and students create and arrange music using various music software programs. Performance is a large focus for this subject. Students explore personal style and interpretation in their performances. In Year 10 Music Performance, students are encouraged to focus on a chosen instrument. It is recommended that students wishing to study VCE Music undertake this yearlong subject, however it is not a prerequisite for VCE Music.

Year 10 Theatre Studies and Design

During this semester-based unit, students experiment with a variety of theatre-based skills. This includes acting, script writing, directing to set, costume and lighting design. At the end of the semester a live theatre performance is produced by the students. This unit is for students interested in learning the technical and design aspects of theatre. Students interested in both acting and theatre studies and design could opt to study both semester subjects.

VCE Drama

In Units 1 and 2, students study drama theory as well as take part in workshops and performance-based activities with a view to creating and presenting both solo and group works. The performance School Assessed Tasks (Solo and Ensemble) in Units 3 and 4 make up a large portion of the work covered as well as drama theory, theatre visits and performance analysis.

Unit 1 – Introducing Performance Styles

This unit focuses on creating, presenting and analysing a devised performance that includes real or imagined characters, based on personal, cultural and/or community experiences and stories. Students study three or more performance styles from a range of cultural contexts examining the drama traditions of ritual and storytelling. This unit also involves analysis of a student's own performance work and analysis of a performance by professional and other practitioners.

Areas of Study include:

- Creating a devised performance
- Presenting a devised performance
- Analysing a devised performance
- Analysing a professional drama performance

Unit 2 – Australian Identity

This unit focuses on the use and documentation of the processes involved in constructing a devised solo or ensemble performance symbolising aspects of Australian identity. Students examine selected performance styles and conventions to create work from a contemporary or historical Australian context. This unit also involves analysis of a student's own performance work and analysis of a performance by professional and other practitioners.

Areas of Study include:

- Using Australia as inspiration
- Presenting a devised performance
- Analysing a devised performance
- Analysing an Australian drama performance



Unit 3 – Devised Ensemble Performance

Students explore performance styles and associated conventions from a diverse range of contemporary and/ or traditional contexts. They work collaboratively to devise, develop and present an ensemble performance. The processes involved in the development and realisation of the ensemble performance are analysed and evaluated. A professional work selected from the VCAA prescribed play list will also be analysed.

Areas of Study include:

- Devising and presenting ensemble Performance
- Analysing a devised ensemble performance
- Analysing and evaluating a professional drama performance

Unit 4 – Devised Solo Performance

This unit focuses on the use of stimulus material and resources from a variety of sources to create and develop characters within a solo performance. Students complete two solo performances. For a short solo performance (school assessed) they develop the practical skills of researching, creating, presenting, documenting and analysing a solo performance. In the development of a second solo performance (externally assessed) students devise, rehearse and perform an extended solo performance in response to a prescribed structure published by the VCAA. The processes involved in the creation and presentation of character/s in solo performance are analysed and evaluated.

Areas of Study include:

- Demonstrating techniques of solo performance
- Devising a solo performance
- Analysing and evaluating a devised solo performance



VCE Music Performance

In VCE Music, students develop performance, musicianship and critical awareness skills. They learn, develop and apply musicianship skills as they create, interpret, analyse and present solo and ensemble works. Students study and perform musical works of different styles, genres and cultures. They analyse and evaluate live and pre-recorded performance and develop skills in interpretation of musical elements in performance and compositional contexts. As performers, students learn how to effectively communicate and express musical ideas to an audience.

There are no prerequisites for entry into Units 1 - 3 Music Performance, however it is recommended that students have a sound knowledge of their instrument/s with at least three or more years' experience in learning their instrument prior to entering Unit 1. Students are required to undertake formal instrumental lessons on their chosen instrument (at their own expense) either through the College's Instrumental Music Program (preferred) or through a private music studio.

Unit 1 – Music Performance

This unit focuses on developing solo and ensemble skills in music performance. Students develop their skills and techniques for preparing solo and ensemble works for performance. Musicianship and analysis of live and pre-recorded works is also studied. Whilst there are no pre-requisites for entry into Unit 1, it is highly recommended that students have a sound knowledge and understanding of their chosen instrument and undertake private instrumental lessons.

Areas of Study include:

- Performance
- Preparing for Performance
- Music Language

Unit 2 – Music Performance

In this unit students continue developing their performance, analysis and musicianship skills. They perform as soloists as well as members of an ensemble and develop effective ways of preparing for performance. Students continue developing their analysis skills of both live and pre-recorded settings as well as continue developing their musicianship skills. In Unit 2, students apply their performance, analysis and musicianship skills by creating their own compositions and will use music software to digitally present their composition.

Areas of Study include:

- Performance
- Preparing for Performance
- Music Language
- Organisation of Sound



Unit 3 – Music Performance (solo or group)

One of the main focuses for Units 3 and 4 is to prepare students for a formal recital setting. Students continue to study their principal instrument and refine their skills and techniques on this instrument. They prepare and present works in formal and informal settings in preparation for their final end-of-year recital. Students study performance techniques and build upon and refine their theory, aural and analysis skills. Students analyse Australian music as well as music from diverse cultures, times and locations. Students must elect either a solo or ensemble focus for their external end-of-year recital. This is determined at the commencement of Unit 3.

Areas of Study include:

- Performance
- Preparing for Performance
- Music Language

Unit 4 – Music Performance (solo or group)

Students continue to study their principal instrument and refine their skills and techniques on this instrument. They focus on preparing for the final end-of-year performance program. Students prepare and present works in formal and informal settings and continue to address challenges in their performance works by developing effective practice skills, exercises and habits. Musicianship, critical awareness, listening and responding skills are further developed.

Areas of Study include:

- Performance
- Preparing for Performance
- Music Language



VET Certificate III in Music Industry (Sound Production)

This course covers core skills in sound production. It provides students with the practical skills and knowledge to record, mix and edit sound sources. Areas covered include maintaining and operating sound equipment, setting up and disassembling sound equipment and recording, editing and mixing music. Students interested in sound production are encouraged to apply for this course. The skills and knowledge attained from VET Music Industry are also beneficial and complementary to the study of VCE Music Performance.

Students wishing to receive a study score for Certificate III in Music Industry (Sound Production) must undertake scored assessment and will therefore need to complete all assessments and examinations. Students must achieve eleven units of competency to gain Certificate III in Music Industry.

Successful completion of Certificate III in Music Industry directly leads to Certificate IV in Music Industry.

Year 11 - Unit 1 and 2

Modules:

- Contribute to health and safety of self and others
- Implement copyright arrangements
- Work effectively in the music industry
- Apply knowledge of style and genre to music industry practice
- Develop basic audio skills and knowledge
- Perform basic sound editing

Year 12 - Unit 3 and 4

Modules:

- Operate sound reinforcement systems
- Record and mix a basic music demo
- Install and disassemble audio equipment
- Mix music in a studio environment
- Manage audio input sources



VCE Dance

In VCE Dance, students explore movement as an instrument for creative expression and communication. They create and perform their own dance works as well as interpret and analyse live and pre-recorded performances. Students study dance of different times, cultures and locations and develop their choreographic skills by developing their own as well as learnt movement vocabularies. Through the study of other choreographers and their creative works, students learn how to communicate through movement in their own created dance works. Students perform solo and group dance works, both learnt, and student created. In VCE Dance, students are regarded as performers, choreographers and members of an audience.

Unit 1 - Dance

In this unit students begin exploring movement as an instrument for creative expression and communication. They create and perform their own dance works as well as interpret and analyse live and pre-recorded performances. Students study dance of different times, cultures and places. They begin developing their own movement vocabulary as well as documenting and analysing movement. Physiology, health, wellbeing, care and maintenance of the dancer's body is also studied. Students study and discuss choreographers, influences of these choreographers and influences on intention and movement in selected dance works.

Areas of Study include:

- Dance perspectives
- Choreography and performance
- Dance technique and performance
- Awareness and maintenance of the dancer's body

Unit 2 – Dance

In Unit 2, students explore the elements of movement. They study dance traditions, styles and works of traditional and/or contemporary Aboriginal and Torres Strait Islander Peoples and other Australian dance artists. Musical theatre, tap/jazz, ballet and modern dance material may also be studied. Students continue developing their personal movement vocabulary and continue studying choreographic processes, devices and skills and analysis of choreographers and their influencers. Students create a dance work using choreographic processes.

Areas of Study include:

- Dance perspectives
- Choreography and performance
- Dance technique and performance



Unit 3 - Dance

In this unit, students continue developing their dance training. They learn to perform a duo or group dance work with artistry and continue developing their movement vocabulary. Students analyse the realisation of their solo and learnt duo/group dance work and further develop their understanding choreographic processes. In Unit 3, students are required to analyse two dance works from the Prescribed list of dance works for Unit 3.

Areas of Study include:

- Dance perspectives
- Choreography, performance and analysis of a skills-based solo dance work
- Dance technique, performance and analysis of a learnt dance work

Unit 4 - Dance

Students continue to develop their understanding of choreographic processes. They document and analyse the choreographing, rehearsing, preparing to perform and performing of the dance work. Students undertake several analysis focuses and investigate choices made by choreographers. Students perform a dance work with a focus of communicating intention.

Areas of Study include:

- Dance perspectives
- Choreography, performance and dance-making analysis

Arts: Visual

Art and Visual Communication

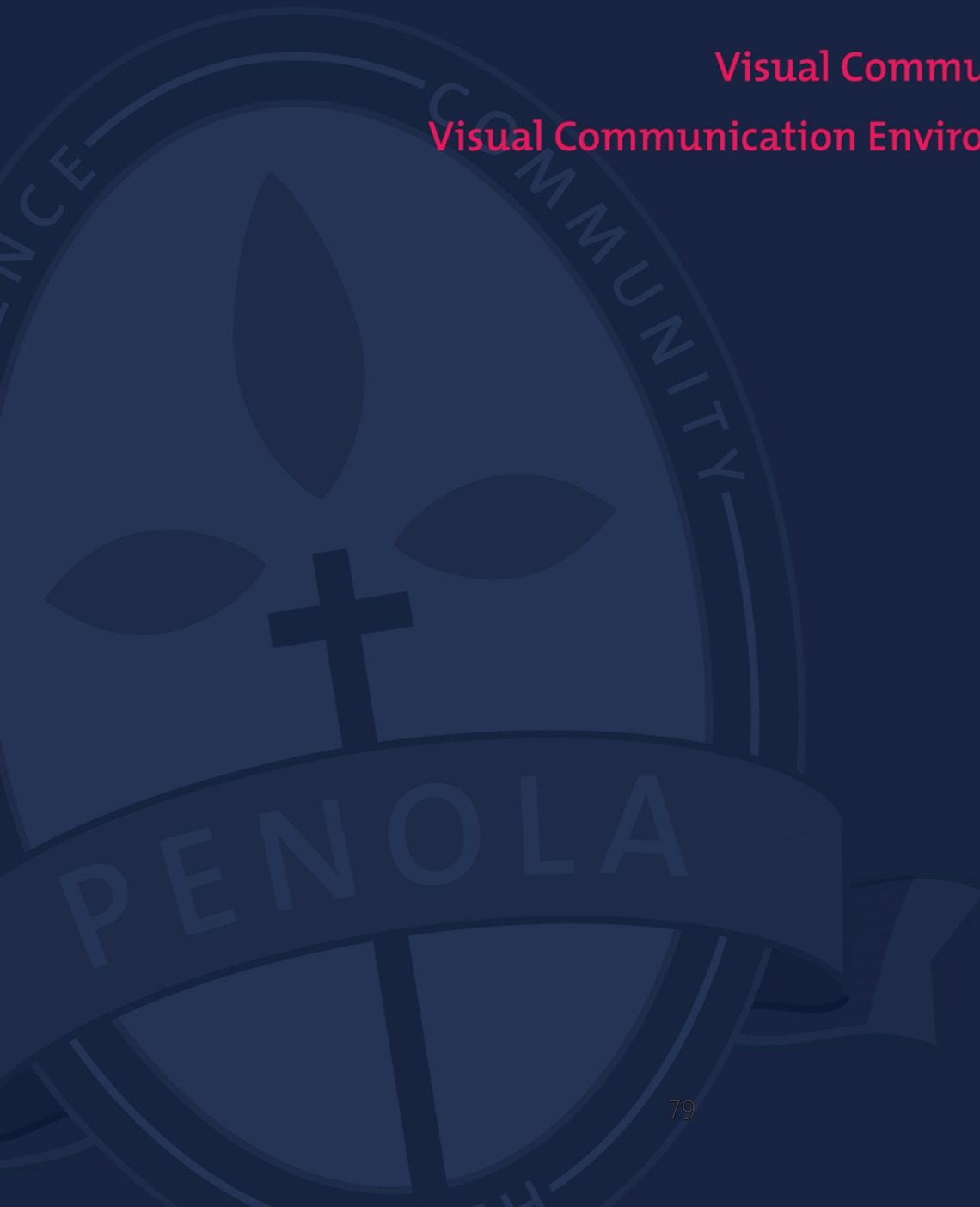
Studio Art

Studio Art - Sculpture

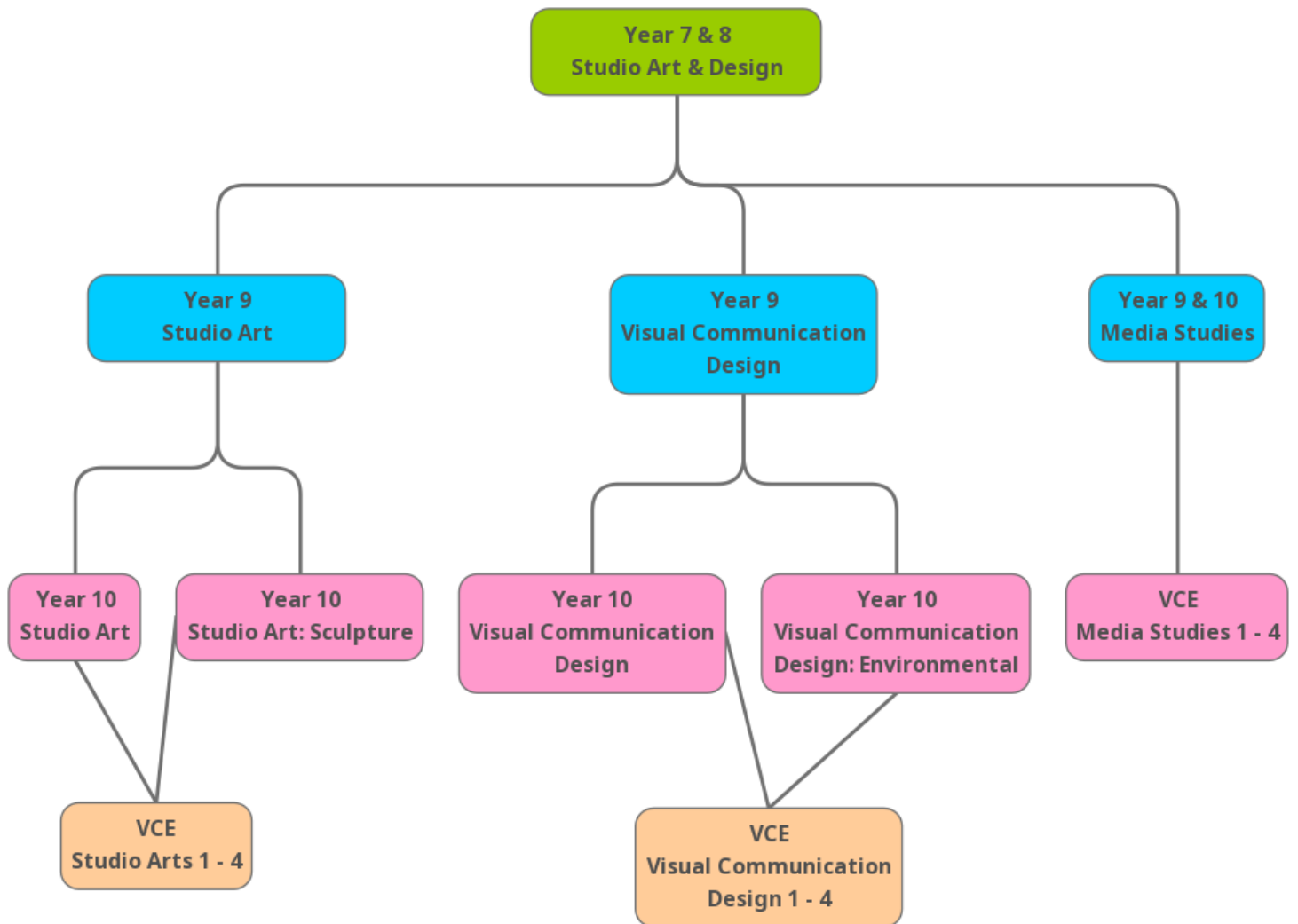
Media

Visual Communication Design

Visual Communication Environmental Design



Visual Art Pathways



The Arts

Year 7 & 8

Year 7 and 8, students undertake a full year of Visual Arts study. They make and respond to examples of visual art and design. Exploring and creating visual expressions of selected themes through a variety of art forms and styles. Students explore visual arts practices as inspiration to explore and develop themes, concepts or ideas in artworks. They explore how artists use materials, techniques, technologies and processes to realise their intentions in artworks. Students experiment with materials, techniques, technologies and processes in a range of art forms and visual communications to express ideas, concepts and themes. Students analyse how ideas and viewpoints are expressed and how they are viewed by audiences.

Year 7 Art and Visual Communication Design

Students will begin to explore a variety of artforms and visual communications. They will be encouraged to experiment and explore themes, developing their own style, expression and methods of communicating ideas. Students will aim to research and develop ideas, and become more aware of materials, equipment, tools and their applications.

Year 8 Art and Visual Communication Design

Students will begin to explore a variety of artforms and visual communications. They explore themes, including identity and their world. Students are encouraged to further develop their creative and critical thinking and practical skills including the safe use of materials and equipment. At year 8 they focus on developing personal style, expression and methods of communicating ideas.



The Arts

Year 9

The Visual Arts Curriculum at Year 9 are Semester based. Students are required to select at least one Visual Art subject for the year.

In Year 9, students explore the visual arts practices and styles of other artists and designers as inspiration to develop a personal style. They explore and express ideas, concepts and themes in works of art and design. Students explore how artists utilise materials, techniques, technologies and processes to develop and express their intentions. Through practice they manipulate various materials, explore techniques, technologies and processes in a range of art forms to express ideas, concepts and themes. Students Respond and interpret the different forms of expression, intentions and viewpoints of artists and designers, and how they are viewed by audiences. Students analyse, interpret and evaluate a range of visual communications from different cultures, historical and contemporary contexts, including artworks by Aboriginal and Torres Strait Islander Peoples to explore differing viewpoints.

To successfully complete the Year 9 courses students will be required to submit a Folio of developmental and final works and a Visual Analysis.

Studio Art

In this Unit, Students explore a variety of art forms, developing ideas and skills for the creation of their own art works and expression. Students explore and respond to artworks as inspiration from different art periods and cultures. They further develop their understanding and use of art elements and principles, skills, techniques and processes to produce a folio of works. Students analyse and discuss artworks that explore various themes and styles from different historical-cultural contexts.

Media

In this Unit, Students focus on developing their understanding of digital photographic processes. They undergo tasks that explore Visual storytelling, including the research and analysis of contemporary and historical photographers. Students are introduced to and develop skills using Adobe Photoshop to manipulate and edit imagery to communicate ideas and style.

Visual Communication Design

In this unit, students' study both visual communication design techniques and industrial design drawing skills relating to 3D Drawing systems. They undertake tasks concentrating on the creation of image and type-based designs. They analyse the visual communication of others to develop an appreciation of effective design and the skilful uses of design elements and principles.



The Arts

Year 10

In Year 10, students choose at least one semester unit from the Visual Arts learning area.

The Visual Arts open many pathways to employment and further studies for those who are creative. Therefore, students may choose more than one elective as part of their Year 10 program. All Year 10 students must select at least one Semester unit from the following electives:

- Studio Art
- Studio Art Sculpture
- Media
- Visual Communication, Environmental Design
- Visual Communication Design.

All courses conclude with an end of unit Examination.

It is important to note that choices made in Year 10 do not limit future choices in Year 11. There are no prerequisites for any Year 10 unit or any VCE unit in this learning area.

Studio Art

During this Semester-based unit, students will undertake a more specialised Visual Arts specific study in preparation for future VCE Studies in Studio Art Unit 1 & 2. Studio Art Students will focus on the development of both practical, critical and creative thinking skills. They will explore art forms such as painting, printmaking and drawing, responding to sources of inspiration and communicating personal ideas.

Media

In this semester-based unit, students will undertake a more specialised Visual Arts specific study in preparation for future VCE Studies in Media Unit 1 & 2. Students will complete a range of tasks based on film and news media. They will study and produce a video production, cinema analysis and continue to develop digital based production design skills. Students examine, discuss and analyse media examples exploring social comment, cultural and personal identity.

Studio Art – Sculpture

In this Semester-based unit, students will focus their studies on creating three dimensional forms of sculptural artworks. They will have the opportunity to experiment with a variety of materials including ceramics, wire, recycled manufactured materials and natural fibres. Students will discuss and analyse sculptural artworks from different periods and cultures. Although this unit focuses on sculptural construction skills, the fundamentals of communicating ideas through drawing will also be covered. This specialised art study helps prepare students for future VCE subject choices in Studio Art.

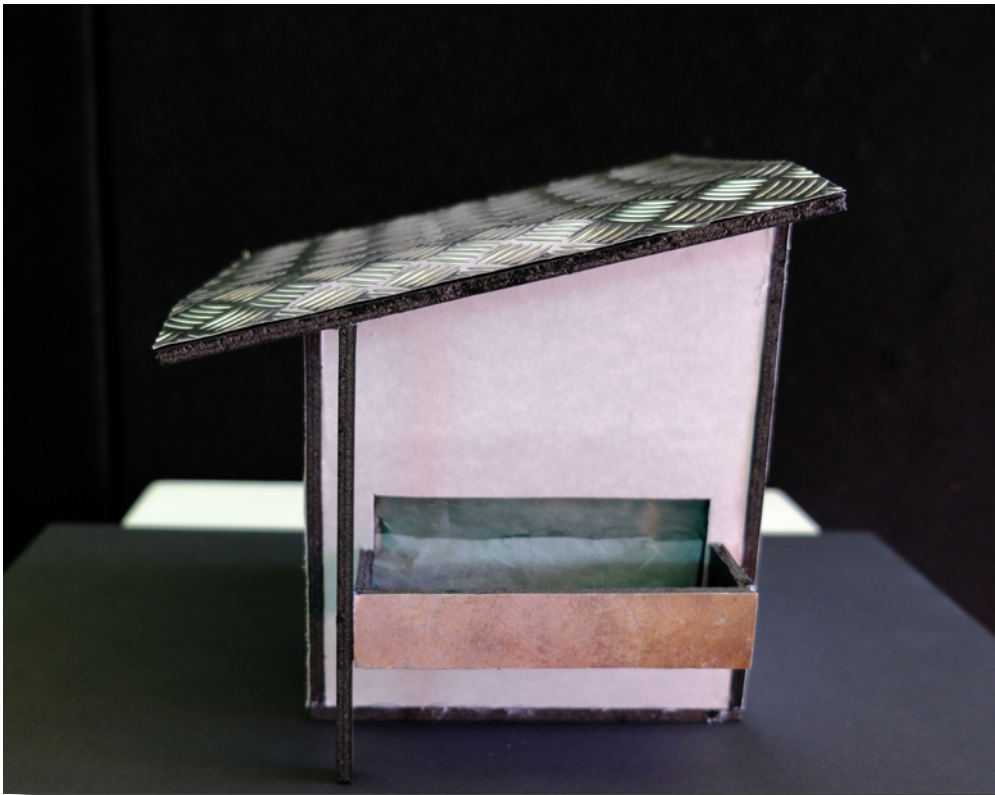


Visual Communication Design

In this Semester-based unit, students will use the visual communication design process to fulfil specific briefs related to design layout, lettering and illustration. They further develop lettering, drawing and rendering skills using the design elements and principles, and to analyse other designers' work. Students will also use computer technology in the development and presentation of designs. Students will undertake tasks in layout design, packaging and illustration in the preparation for VCE Visual Communication Design.

Visual Communication Environmental Design

In this Semester-based unit, students will specifically study different Environmental design areas such as architectural and landscape design. They will develop technical drawing, layout and rendering skills. Students will study specific presentation conventions relating to Environmental design 2D and 3D processes. They will also explore digital technologies in the creation and presentation of architectural designs. Students will analyse and discuss contemporary examples of architecture and landscape design. This study helps students in preparation for VCE Visual Communication design.



VCE Media

The media is ubiquitous in today's world. Working on a personal, local, national and global level, media is deeply embedded within life and culture. It entertains, teaches, informs, and shapes audiences' perception of their lives and the worlds in which they live. Stories in all their forms are at the heart of the media and its relationship with audiences. Media audiences are no longer constrained by physical, social and political boundaries. Audiences are consumers, users, creative and participatory producers and product. This has created a dramatic increase in communicative, cultural and creative possibilities. The greater involvement of audiences has generated enormous changes in the media economy and issues of content control. Students examine how and why the media constructs and reflects reality and how audiences engage with, consume, read, create and produce media products.

Unit 1 - Media forms, representation and Australian Stories

In this unit, students develop an understanding of audiences and the concepts underpinning the construction of representations and meaning in different media forms. Through analysing the structure of narratives, students consider the impact of media creators and institutions on production. Students develop an understanding of the features of Australian fictional and non-fictional narratives in different media forms.

Areas of Study include:

- Media representations
- Media forms in production
- Australian stories
- Written Examination

Unit 2 - Media Narratives across Media forms

In this unit, students further develop an understanding of the concept of narrative in both traditional and modern forms. They analyse the influence of new media technologies and their impact on modes of audience engagement, consumption and reception. Students will design and create narratives that demonstrate an awareness of media codes and conventions.

Areas of Study include:

- Narrative, style and genre
- Narratives in production
- Media and change
- Written examination



Unit 3 - Media narratives pre-production

In this unit students explore stories that circulate through media narratives. They consider the use of media codes and conventions to structure meaning, and how this construction is influenced by the social, cultural, ideological and institutional contexts of preproduction, distribution, consumption and reception. Students use the preproduction stage of the media production process to design the productions of a media product for a specified audience. They explore and experiment with media technologies to develop skills in their selected media form, reflecting on the documenting of their progress.

Areas of Study include:

- Narrative and ideology
- Media production development
- Media production design

Unit 4 - Media production and issues in the media

In this unit students focus on the production and post-production stages of the media production process, bringing the media production design created in Unit 3 to its realisation. They refine their media production in response to feedback and through personal reflection, documenting the iterations of their production as they work towards completion. Students explore the relationship between the media and audiences, focusing on the opportunities and challenges afforded by current developments in the media industry. They consider the nature of communication between the media and audiences; explore the capacity of the media to be used by governments, institutions and audiences, and analyse the role of the Australian government in regulating the media.

Areas of Study include:

- Media production
- Agency and control in and of the media
- Written examination



VCE Studio Art

Studio Art encourages and supports students to recognise their individual potential as art makers and presents a guided process to assist their understanding and development of art making. The study establishes effective art practices through the application of an individual design process to assist the student's production of a folio of artworks. The theoretical component of this study is an important basis for studio practice as it offers students a model for inquiry that can support their art making practices. Student research focuses on the visual analysis of artworks and investigates how artists have interpreted sources of inspiration and influences in their art making. Students examine how artists have used materials, techniques and processes to create aesthetic qualities. They study how artists have developed styles and explored their cultural identity in their artwork. Students use this knowledge to inform their own processes to support their art making.

Unit 1 Studio Art inspiration and techniques

In this unit students focus on developing an individual understanding of the stages of studio practice and learn how to explore, develop, refine, resolve and present artworks. Students explore sources of inspiration, research artistic influences, develop individual ideas and explore a range of materials and techniques related to specific art forms.

Areas of Study include:

- Researching and recording ideas
- Studio practice
- Visual analysis report
- Presentation of at least one finished artwork
- Written Examination

Unit 2 Studio Art exploration and concepts

Students explore and develop ideas and subject matter, create aesthetic qualities and record the development of the work in a visual diary as part of the studio process. Through the study of art movements and styles, students begin to understand the use of other artists' work in the making of new artworks. Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand developments in studio practice. Using a range of art periods, movements or styles, students develop a broader knowledge about the history of art.

Areas of Study include:

- Exploration of studio practice and development of artworks
- Ideas and styles in artworks, studio process
- Presentation of at least one finished artwork
- Visual analysis report
- Examination



Unit 3 Studio Art practice and process

Students focus on the implementation of an individual studio process leading to the production of a range of potential directions. Students develop and use an exploration proposal to define an area of creative exploration. They plan and apply a studio process to explore and develop their individual ideas. Students investigate and analyse the response of artists to a wide range of source material and examine their use of materials and techniques. They explore professional art practices of artists from different historical and cultural contexts in relation to artworks and art forms. The exhibition of artworks is integral to Unit 3 and students are expected to visit a variety of exhibitions throughout the unit, reflect on the different environments where artworks are exhibited and examine how artworks are presented to an audience.

Areas of Study include:

- Exploration proposal
- Studio process
- Artists and studio practices (SAC)

Unit 4 Studio Art practice and art industry context

Students focus on the planning, production and evaluation required to develop, refine and present artworks that link cohesively according to the ideas resolved in Unit 3. To support the creation of artworks, students present visual and written evaluation that explains why they selected a range of potential directions from Unit 3 to produce at least two finished artworks in Unit 4.

Areas of Study include:

- Production and presentation of artworks
- Evaluation
- Art industry contexts (SAC)



VCE Visual Communication Design

The Visual Communication and Design course examines the way visual language can be used to convey ideas, information and messages in the fields of communication, environmental and industrial design. The study emphasises the importance of developing a variety of drawing skills to visualise thinking. Students develop the skills to manipulate and organise design elements, design principles, selected media, materials and production methods when creating visual communications. Throughout the study, students explore manual and digital methods to develop and refine presentations.

Unit 1 - Visual Communication Design

This unit focuses on using visual language to communicate messages, ideas and concepts. This involves acquiring and applying design thinking skills as well as drawing skills to make messages, ideas and concepts visible and tangible. Students practice their ability to draw what they observe and they use visualisation drawing methods to explore their own ideas and concepts. Students explore elements and design principles and develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications.

Areas of Study include:

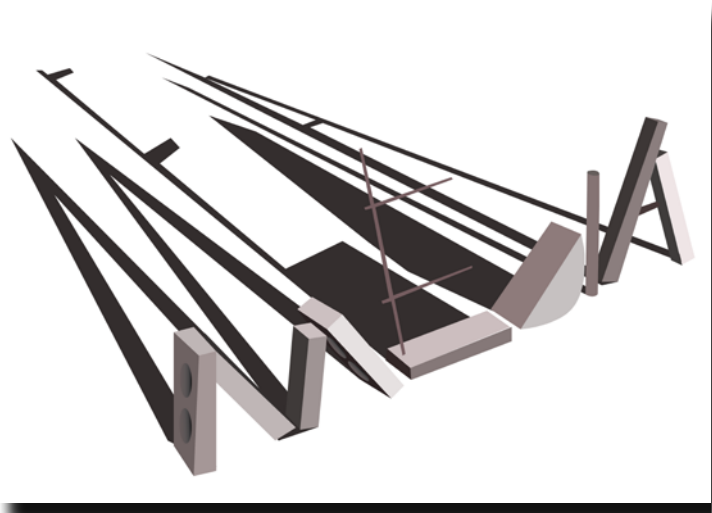
- Drawing as a means of communication
- Design elements and design principles
- Visual communications in context
- Written Examination

Unit 2 - Visual Communication Design

This unit focuses on the application of visual communication design knowledge, design thinking skills and drawing methods to create visual communications to meet specific purposes in designated design fields. Students use presentation drawing methods that incorporate the use of technical drawing conventions to communicate information and ideas associated with the environmental or industrial fields of design. They apply design thinking skills when exploring ways in which images and type can be manipulated to communicate ideas and concepts in different ways in the communication design field.

Areas of Study include:

- Type and imagery in context
- Technical drawing in context
- Applying the design process
- Written Examination



Unit 3 Visual Communication Design

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

Areas of Study include:

- Analysis and practice in context
- Design industry practice
- Developing a brief and generating ideas

Unit 4 Visual Communication Design

The focus of this unit is the development of design concepts and two final presentations of visual communications to meet the requirements of the brief. This involves applying the design process twice to meet each of the stated needs. Students utilise a range of digital and manual two and three dimensional methods, media and materials. They investigate how the application of design elements and design principles creates different communication messages with their target audience. Students refine and present two visual communications within the parameters of the brief. They reflect and evaluate the design process and the design decisions they took in the realisation of their ideas.

Areas of Study include:

- Development, refinement and evaluation
- Final presentations
- Written Examination



Health & Physical Education

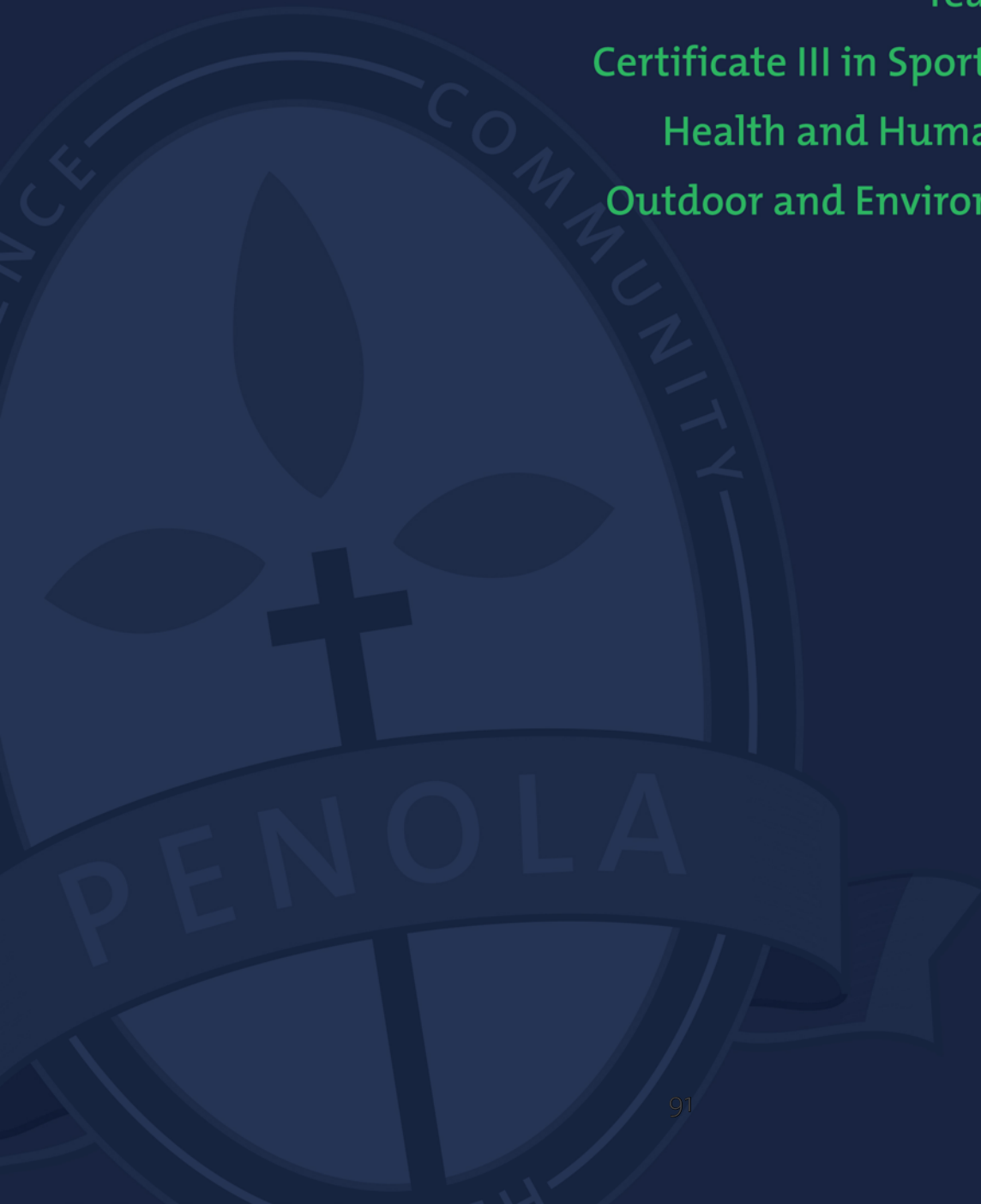
Year 7 - 10 Health and Physical Education

Year 9 - 10 Electives

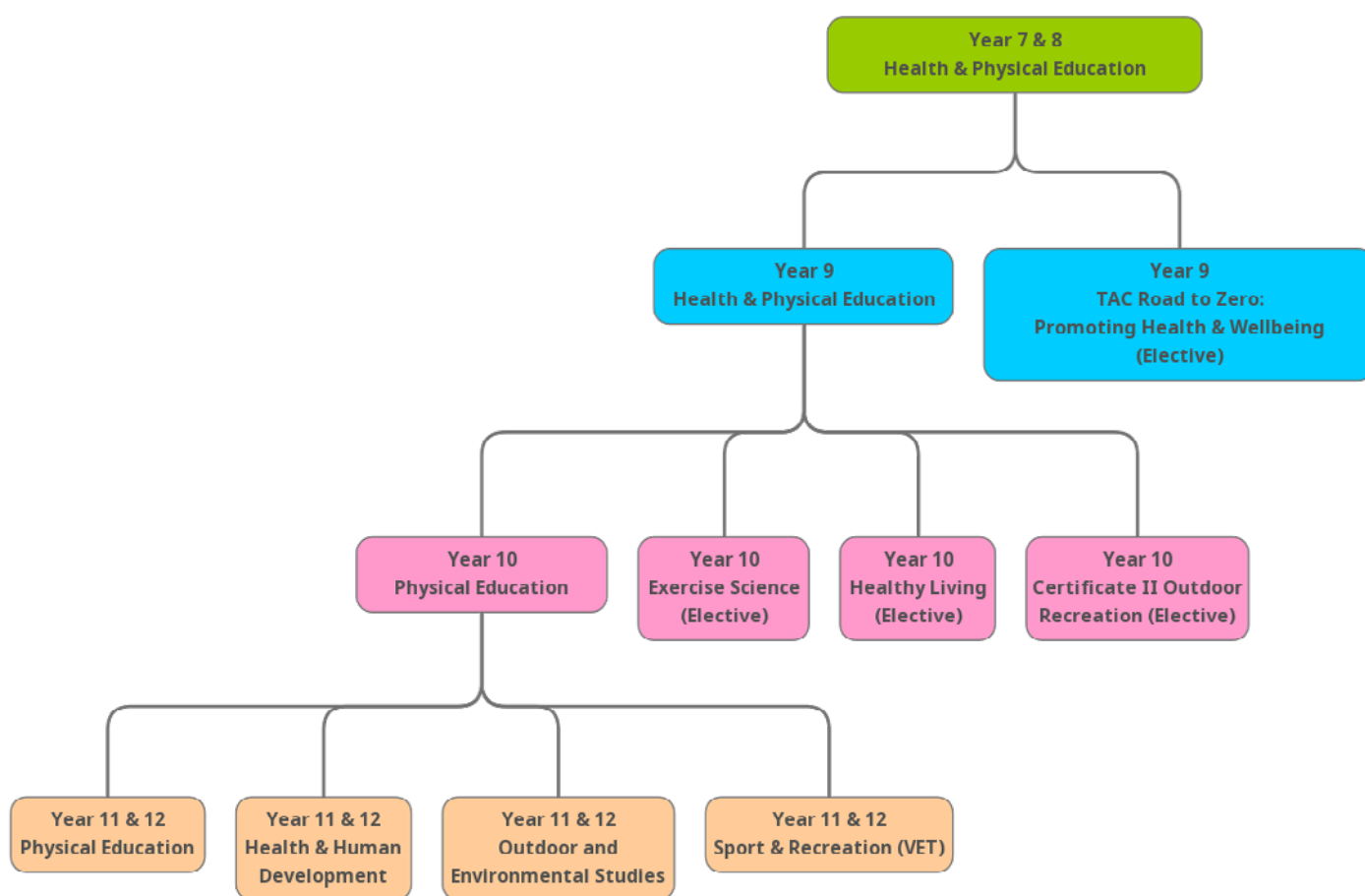
Certificate III in Sport and Recreation

Health and Human Development

Outdoor and Environmental Studies



Health & Physical Education Pathways



Health & Physical Education

Year 7 - 10

Physical Education is the acquisition of movement skills, concepts and strategies to enable students to confidently, competently and creatively participate in a range of physical activities. As a foundation for lifelong physical activity participation and enhanced performance, students develop proficiency in movement skills, physical activities and movement concepts and acquire an understanding of the science behind how the body moves. In doing so, they develop an appreciation of the significance of physical activity, outdoor recreation and sport both in Australian society and globally.

Movement is a powerful medium for learning, through which students can acquire, practice and refine personal, behavioural, social and cognitive skills. The Physical Education curriculum at Penola Catholic College provides students an opportunity to develop their movement skills within the school environment and also takes them into the community to be active and identify possible opportunities for them to continue physical activity in their own time, outside of school hours.

The knowledge, understanding, skills and dispositions students develop through movement in Physical Education, encourages students to take up activity across their lifespan and in turn lead to positive health outcomes. Movement competence and confidence is seen as an important personal and community asset to be developed, refined and valued. Engaging with their peers to achieve team outcomes and develop movement sequences allows them to develop appropriate social connections with their peers.

Physical Education aims to develop the knowledge, understanding and skills to enable students to:

- acquire, apply and evaluate movement skills, concepts and strategies to respond confidently, competently and creatively in a variety of physical activity contexts and settings
- engage in and enjoy regular movement-based learning experiences and understand and appreciate their significance to personal, social, cultural, environmental and health practices and outcomes
- analyse how varied and changing personal and contextual factors shape understanding of, and opportunities for, physical activity locally, regionally and globally.

Year 7 - 10 Physical Education

- Gymnastics Dance
- Swimming
- Athletics
- Outdoor Education
- Volleyball
- SEPEP

Major Games and Activities including:

- Basketball
- European Handball
- Skateboarding
- Bike Education
- Netball
- Soccer
- Striking Sports
- Rockclimbing
- Weight Training



Health & Physical Education

Year 8 - 9

In Health, students develop the knowledge, understanding and skills to strengthen their sense of self, and build and manage satisfying relationships. The curriculum helps them to be resilient, and to make decisions and take actions to promote their health, safety and physical activity participation. As students mature, they develop and use critical inquiry skills to research and analyse the knowledge of the field and to understand the influences on their own and others' health, safety and wellbeing. They also learn to use resources for the benefit of themselves and for the communities with which they identify and to which they belong.

Rather than focusing only on potential health risks or a deficit-based model of health, the curriculum has a stronger focus on supporting students to develop the knowledge, understanding and skills they require to make healthy, safe and active choices that will enhance their own and others' health and wellbeing.

This approach affirms that all students and their communities have particular strengths and resources that can be nurtured to improve their own and others' health, wellbeing, movement competence and participation in physical activity. The curriculum recognises that students have varying levels of access to personal and community resources depending on a variety of contextual factors that will impact on their decisions and behaviours.

Health literacy allows an individual to gain access to, understand and use health information and services in ways that promote and maintain health and wellbeing. The Health curriculum focuses on developing knowledge, understanding and skills related to health literacy.

Health aims to develop the knowledge, understanding and skills to enable students to:

- develop and use personal, behavioural, social and cognitive skills and strategies to promote a sense of personal identity and wellbeing and to build and manage respectful relationships.
- analyse how varied and changing personal and contextual factors shape understanding of, and opportunities for, health locally, regionally and globally.
- access, evaluate and synthesise information to take positive action to protect, enhance and advocate for their own and others' health, wellbeing, safety and physical activity participation across their lifespan.

Years 8 - 9 Health Education

At Penola Catholic College, topics covered will include:

- Water Safety
- Sexuality & Relationships
- Drug Education
- Promoting Health
- Mental Health

Health Elective - Promoting Health and Wellbeing

This unit aims to provide students with an understanding of health promotion in the real world using the TAC and Melbourne Museum exhibition “Road to Zero”. The students will attend an excursion to the Melbourne Museum to be immersed in a day of interactive learning activities that will inform them about health and wellbeing issues related to their age group regarding road use. This exhibition is a world first and an exciting opportunity for students to provide possible steps to advocate for better health and wellbeing outcomes for their age group in regard to road use.

During their class time back at school, students will learn what is required for a powerful health promotion program to have success and evaluate their own health promotion programs against this information. The course will conclude with students presenting their own health promotion program to their peers of Year 9, with the intent of changing/modifying behaviours regarding road use.



Health & Physical Education

Year 10

In Year 10, all students will undertake two periods per week of Physical Education for the full year. Students can also choose from three different semester units in the Health and PE Learning Area as part of their free choices.

Exercise Science - Human Movement

This Semester unit aims to provide a basic introduction to the Body Systems including Neuromuscular and Skeletal systems as well as the Cardiovascular and Respiratory systems. Sports injury and rehabilitation and Sports Psychology will also be explored in this unit. The subject will provide an introduction to Energy systems which is a major component of the Year 12 Physical Education curriculum.

Health Living

Healthy Living is a semester subject where students are introduced to the concepts of Health Status and Factors Influencing Health Status in Australia. While it is not a prerequisite for VCE Health & Human Development, it does provide a snapshot of what students can expect if they choose to continue with the subject through VCE.

The unit has both an individual health and community health focus with units including:

- The role of nutrition & exercise in individual and population health
- Nutritional health of Australians
- Health Status and factors that influence Health Status in Australia
- Diet related diseases
- Health promotion programs aiming to improve Australia's Health Status

Certificate II Outdoor Recreation

This is a full year VET subject which will give students a TAFE certificate. Students will be working towards their Certificate II in Outdoor Recreation, by completing 6 core and 5 elective units.

The Outdoor Recreation program offers students the opportunity to gain both theoretical knowledge and practical skills, while allowing them opportunity to demonstrate competency in a range of areas to prepare them for various outdoor recreation environments.

Work may be undertaken as part of a team and performed under supervision in class, field locations such as camps or indoor recreation centres and facilities, in differing environments such as water-based, dry land and mountainous terrains, using a diverse range of equipment.

VCE Health & Human Development

VCE Health and Human Development takes a broad and multidimensional approach to defining and understanding health and wellbeing. Students examine health and wellbeing, and human development as dynamic concepts, subject to a complex interplay of biological, sociocultural and environmental factors, many of which can be modified by health care and other interventions. They look at the Australian healthcare system and research what is being done to address inequalities in health and development outcomes. They examine and evaluate the work of global organisations such as the United Nations and the World Health Organization, as well as non-government organisations and the Australian government's overseasaid program. Students develop health literacy as they connect their learning to their lives, communities and world.

Unit 1 - Understanding Health and Wellbeing

This unit looks at health and wellbeing as a concept with varied and evolving perspectives and definitions. It takes the view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. As a foundation to the understanding of health, students should investigate the World Health Organization's (WHO) definition and also explore other interpretations.

Areas of study include:

- Health perspectives and influences
- Health and nutrition
- Youth health and wellbeing

Unit 2 - Managing Health and Development

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

Areas of study include:

- Developmental transitions
- Health care in Australia

Unit 3 - Australia's Health in a Globalised World

This unit looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students begin to explore health and wellbeing as a global concept and to take a broader approach to inquiry. As they consider the benefits of optimal health and wellbeing and its importance as an individual and a collective resource, their thinking extends to health as a universal right. Students look at the fundamental conditions required for health improvement, as stated by the World Health Organization (WHO). They use this knowledge as background to their analysis and evaluation of variations in the health status of Australians.

Areas of study include:

- Understanding health and wellbeing
- Promoting health and wellbeing

Unit 4 - Health and Human Development in Global Context

This unit examines health and wellbeing, and human development in a global context. Students use data to investigate health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. Students build their understanding of health in a global context through examining changes in burden of disease over time and studying the key concepts of sustainability and human development.

Areas of study include:

- Health and wellbeing in a global context
- Health and sustainable development goals

Assessment - Units 1 to 4

- Structured questions
- Case studies
- Data analysis
- Research projects
- Examinations



VCE Outdoor & Environmental Studies

VCE Outdoor and Environmental Studies is concerned with the way humans interact with and relate to outdoor environments. 'Outdoor environments' covers environments that have minimum influence from humans, as well as those environments that have been subject to different levels of human intervention. The study enables students to make critically informed comment on questions of environmental sustainability and to understand the importance of environmental health, particularly in local contexts.

Important: This study includes outdoor camps and experiences that incur a compulsory levy.

In 2019 the camp program included:

- 4-day Grampians hike (Year 11)
- 3-day Alpine experience to Mt Hotham (Year 11)
- 4-day Wilsons Promontory hike (Year 12)
- 3-day coastal experience in Anglesea (Year 12)

The 2019 costs were as follows:

- Year 11 Students - \$700 for the year
- Year 12 Students - \$560 for the year

The costs may be similar to 2019. Parents will be informed, and confirmations will be made for our camp destinations, dates and all costs at the parent information evening occurring in Term 4.

Please note: Students school fee accounts must not be in arrears in order for students to be eligible to enrol in Outdoor Education.

Unit 1 - Exploring Outdoor Experiences

This unit examines some of the ways in which humans understand and relate to nature through experiences of outdoor environments. The focus is on individuals and their personal responses to, and experiences of, outdoor environments. Students are provided with the opportunity to explore the many ways in which nature is understood and perceived.

Areas of study include:

- Motivations for outdoor experiences
- Influences on outdoor environments

Unit 2 - Discovering Outdoor Environments

This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the impact of humans on outdoor environments. In this unit students study the impact of nature on humans, and the ecological, social and economic implications of the impact of humans on outdoor environments. Students develop a clear understanding of the impact of technologies and changing human lifestyles on outdoor environments. Students examine a number of case studies of specific outdoor environments, including areas where there is evidence of human intervention.

Areas of study include:

- Investigating outdoor environments
- Impact on outdoor environments

Unit 3 - Relationships with Outdoor Environments

The focus of this unit is the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. Case studies of a range of impacts on outdoor environments are examined in the context of the changing nature of human relationships with outdoor environments in Australia. Students consider a number of factors that influence relationships with outdoor environments.

Areas of study include:

- Historical relationships with outdoor environments
- Relationships with Australian environments since 1990

Unit 4 - Sustainable Outdoor Relationships

In this unit, students explore the sustainable use and management of outdoor environments. They examine the contemporary state of environments in Australia, consider the importance of healthy outdoor environments, and examine the issues relating to the capacity of outdoor environments to support the future needs of the Australian population. Students examine the importance of developing a balance between human needs and the conservation of outdoor environments and consider the skills needed to be environmentally responsible citizens.

Areas of study include:

- Healthy outdoor environments
- Sustainable outdoor environments

Assessments - Units 1 - 4

- Skill competency (outdoor experiences)
- Tests
- Examinations

VCE Physical Education

Physical Education uses both theory and practical sessions to examine the biological, physiological, social and cultural influences on performance and participation in physical activity. Students will have the opportunity to examine factors that affect performance of skills and the complex interrelationship between motor learning and psychological, biomechanical, physiological and sociological factors that influence physical performances. This subject will allow students the ability to gain a greater understanding about their own performance in skilled tasks and evaluate their patterns of physical activity against individuals and groups in Australia.

Unit 1 - The Human Body in Motion

In this unit students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Through practical activities students explore the relationships between the body systems and physical activity, sport and exercise, and how the systems adapt and adjust to the demands of the activity. Students investigate the role and function of the main structures in each system and how they respond to physical activity, sport and exercise.

Areas of study include:

- How does the musculoskeletal system work to produce movement?
- How does the cardiorespiratory system function at rest and during physical activity?

Unit 2 - Physical Activity, Sport and Society

This unit develops students' understanding of physical activity, sport and society from a participatory perspective. Students are introduced to types of physical activity and the role participation in physical activity and sedentary behaviour plays in their own health and wellbeing as well as in other people's lives in different population groups. Through a series of practical activities, students experience and explore different types of physical activity promoted in their own and different population groups.

Areas of study include:

- What are the relationships between physical activity, sport, health and society?
- What are the contemporary issues associated with physical activity and sport?



Unit 3 - Movement Skills and Energy for Physical Activity

This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and techniques to analyse movement skills and apply biomechanical and skill acquisition principles to improve and refine movement in physical activity, sport and exercise.

Areas of study include:

- How are movement skills improved?
- How does the body produce energy?

Unit 4 - Training to Improve Performance

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

Areas of study include:

- What are the foundations of an effective training program?
- How is training implemented effectively to improve fitness?

Assessments: Units 1 - 4

- What are the foundations of an effective training program?
- How is training implemented effectively to improve fitness?

VCE Certificate III in Sport & Recreation

This VET Program is an entry level training program for students wishing to pursue a range of occupations associated with the sport and recreation industry. To gain your Certificate III in Sport and Recreation you need to complete the course over 2 years. If you decide not to continue the course in Year 12, you will only receive a partial completion of the Certificate III. You can though, carry those modules on if you decide to complete a TAFE course later in your academic journey.

The Certificate III in Sport and Recreation qualification aims to provide specific skills and knowledge required for employment at an aquatic centre, gymnasium, or sports centre.

The school works closely with an outside provider called iVet. Together we deliver 16 modules over the two years. These modules are theory based combined with practical lessons to reinforce the concepts that are covered in class.

The course will provide four units on the VCE Certificate and will be used in calculating the ATAR score for tertiary selection.

Units 1 and 2 - Units of Competency

Core Units:

- Organise personal work priorities and development
- Apply first aid
- Provide customer service
- Respond to emergency situations
- Follow work health and safety policies
- Develop and extend critical and creative thinking skills
- Follow work health and safety policies
- Use social media tools for collaboration and engagement

Electives:

Develop and update knowledge of coaching practices



Units 3 and 4 - Units of Competency

Core Units:

- Conduct basic warm-up and cool-down programs
- Plan and conduct sport and recreation sessions
- Facilitate groups
- Undertake risk analysis of activities
- Manage conflict
- Develop and update knowledge of coaching practices

Electives:

- Instruct and monitor fitness programs
- Provide fitness orientation and health screening

Assessments: Units 1 to 4

Sport and Recreation assesses student knowledge of set modules through:

- Data analysis
- Tests
- Practical activities in groups and individually
- Written examination
- Projects

The course will provide four units on the VCE Certificate and will be used in calculating the ATAR score for tertiary selection.



Humanities

History

Geography

Civics and Democracy

Business Management

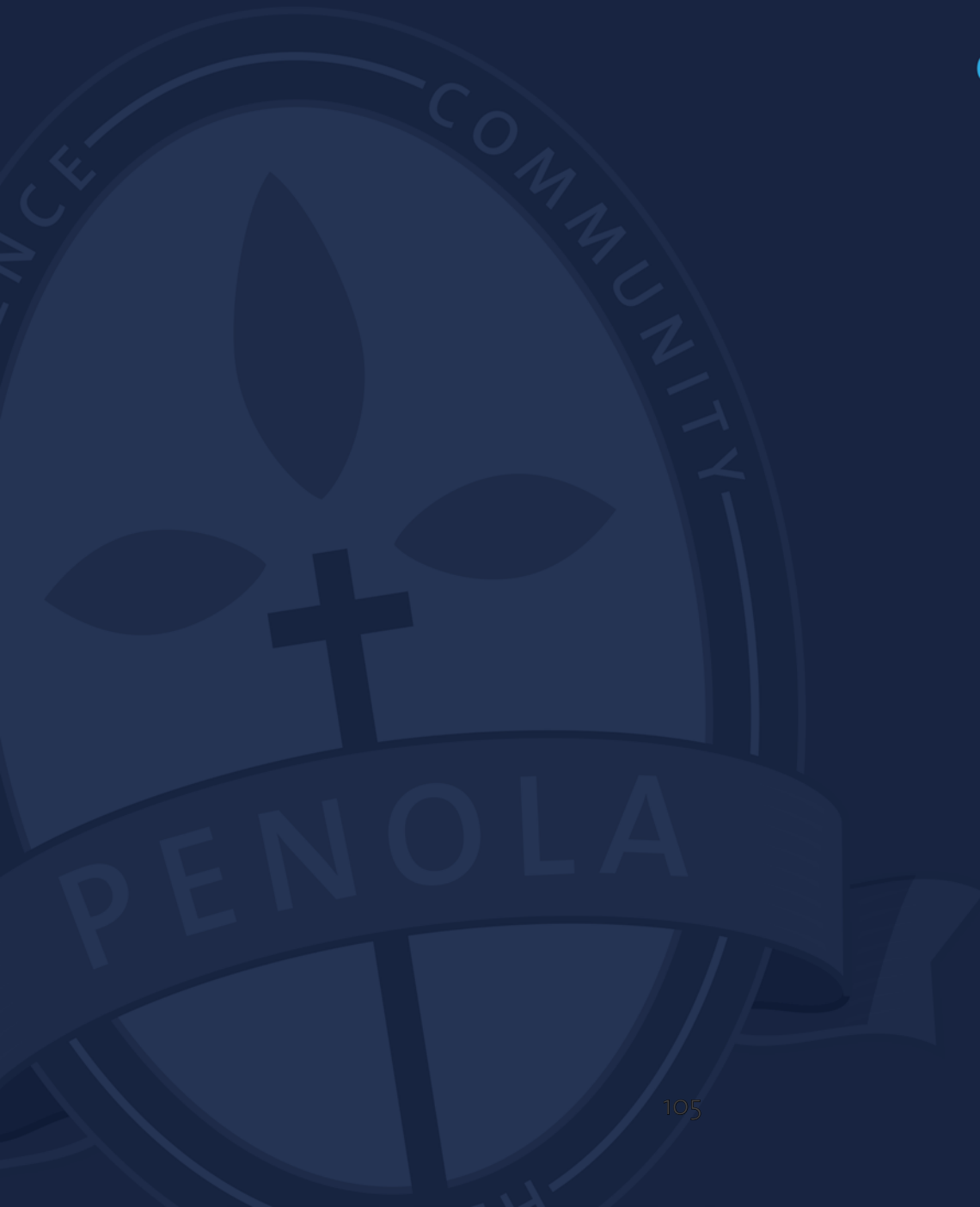
Economics

Accounting

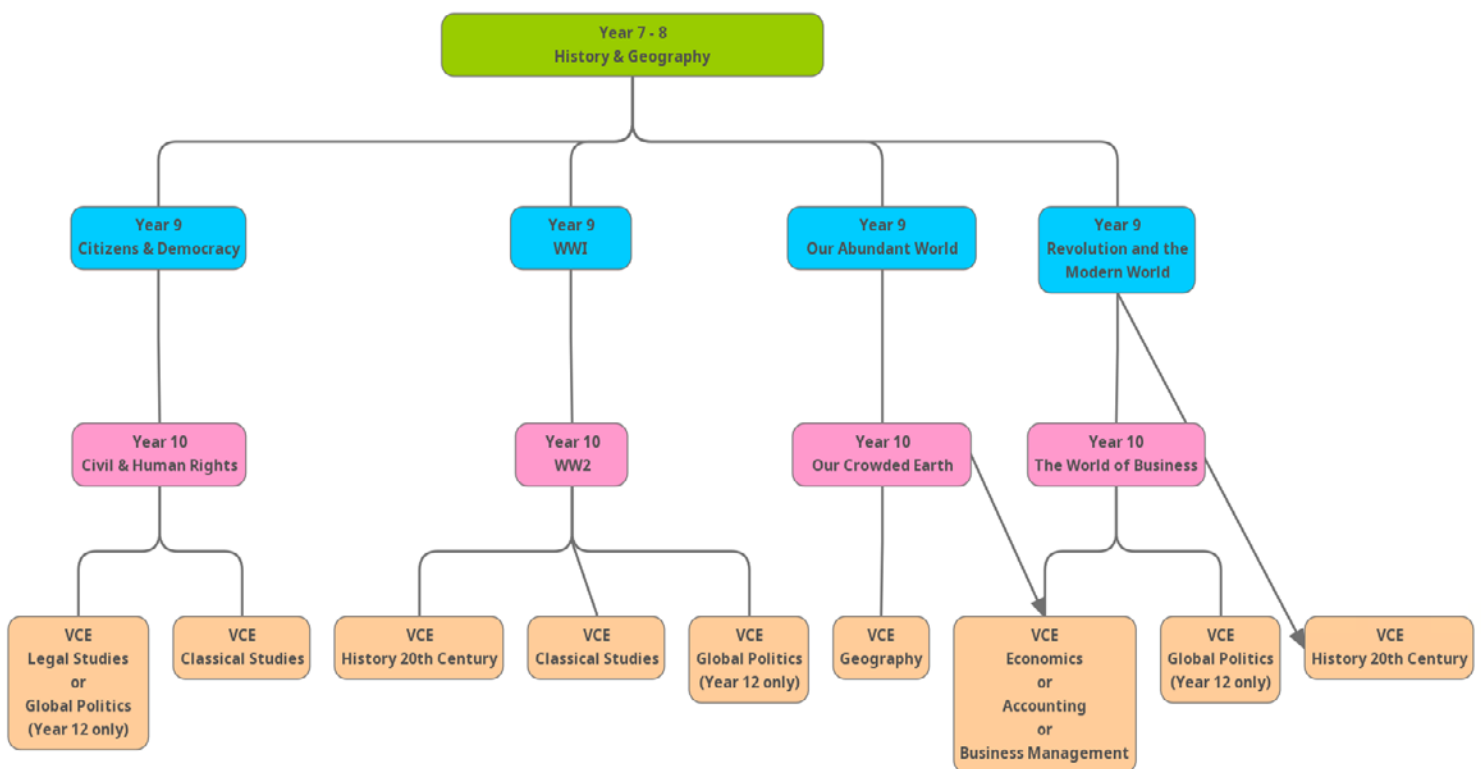
Legal Studies

Classical Studies

Global Politics



Humanities Pathways



Humanities

Year 7 - 8

Humanities at Year 7 and 8 forms a basis of knowledge and skill development that students will be able to use in a variety of Humanities subjects in Years 9-12. Students will mainly study History and Geography, and within their studies they will be introduced to terminology and concepts related with Economics and Business, Civics and Democracy.

Year 7 - Geography

In semester one, the emphasis is on Geography. Students will expand their understanding of Australia and its place in the region. They develop geography skills with a particular emphasis on mapping.

The topics that are studied in Year 7 are:

- Liveability
- Water in the World

Year 7 - History

In semester two, the focus is on History and the exploration of ancient societies. During the study of this Unit students will develop their investigative, analytical and research skills.

The topics that are studied in Year 7 are:

- Ancient Australia
- Ancient Egypt

Year 8 - History

In semester one students study The Middle Ages. Students use investigative and research skills to compare the social, political and economic changes that took place in Europe and Asia during the Middle Ages.

The topics that are studied in Year 8 History are:

- Medieval Europe
- Medieval Japan

Year 8 - Geography

In semester two students focus is on Geography. Students study land, people and the environment, the changes that have occurred over time and similarities and differences between places.

The topics that are covered in Year 8 are:

- Changing Nations
- Landscapes and Landforms



Humanities

Year 9

In Year 9, students will undertake a compulsory Semester of History with the focus on World War One (WWI). Students will then be given the option to choose an elective which covers the disciplines of Civics and Citizenship, Geography and History.

It is expected that students must complete a total of three Semesters of Humanities over a two - year period during Years 9 & 10, this includes the compulsory study of World War One (WWI).

World War One – Compulsory unit

In this unit students will discuss the impact of war on Australia and Europe by studying the main events of WW1. During the study of World War One students will develop skills in analysing, researching and essay writing. The topics covered in WWI include:

- Causes of WWI
- Gallipoli
- End of the War

World War One - CLIL

This is a year long subject. Students will complete the study of World War One **and** Civics and Democracy mainly in Italian. Students who have an average of A to A+ in Year 8 Italian and are enthusiastic about taking on the CLIL challenge in Year 9 may select this as their Humanities choice.

Civics and Democracy – Elective Choice

The study of Civics and Democracy has three distinct topics that are covered during the Semester. The areas that will be covered include:

- Citizenship - students will examine the impact of being a citizen of a nation and the world and the responsibilities that come with citizenship.
- Democracy - students will learn the origins of democracy and what role it plays in our everyday life in Australia.
- Government - students will study the Australian political system, political parties and policies and compare our structure of Government, democratic system of voting and political parties and policies with that of an Asian nation.



Revolution and the Modern World – Elective Choice

The study of Revolution and the Modern World has two distinct topics that are covered during the Semester. The areas that will be covered include:

- Industrial Revolution - students will discover the impact The Industrial Revolution is continuing to have on our lives today even though it began in Europe in 1750. Innovative ideas that shaped the way humans would work and live their daily lives are investigated.
- Migration - students will analyse immigration policies with a more detailed look at the White Australia Policy. A study will be done on the impact migration has had on Australia and its culture.



Our Abundant World – Elective Choice

The study of Our Abundant World has two distinct topics that are covered during the Semester. The areas that will be covered include:

- Feeding the World - students will be able to identify the different types of biomes found on the Earth and their importance to our survival. The management of limited resources are examined and the use of more sustainable farming practices are investigated.
- Interconnection to Place - students will determine our connection with place and the reasons why areas have changed over a period of time. Students will research our interconnectedness with the world through tourism, technology and trade and the impact it has had on the land.



Humanities

Year 10

In Year 10 students must undertake at least one semester from the Humanities Learning Area. In each of the Year 10 units students analyse and draw conclusions about key events during the 20th Century. Students develop and justify their own interpretations about these events, develop explanations and discussions, incorporating historical argument, geographical interpretation of data and identifying economic issues.

In Year 10 students must select at least **one** Semester unit from the Humanities area. **Students must ensure that they have completed three units of Humanities over a two-year period in Years 9 & 10.** This includes the compulsory study of World War One (WWI) completed in Year 9.

World War Two (WWII) - Elective Choice

The study of World War Two has three distinct topics that are covered during the Semester. The areas that will be covered include:

- Causes of the War – Political Ideals – students study the political characteristics along with the economic conditions in Europe, America and Australia towards the end of the 1920's.
- Causes of the War- Leaders - students investigate significant leaders of the first half of the 20th Century such as Adolf Hitler, Benito Mussolini, Joseph Stalin and Hideki Tojo and the political ideals that these leaders practiced before and during WWII.
- Australia's involvement in the War - The Battle of Kokoda is investigated along with Australian Prisoner's of War and the continued development of the Anzac legend during WWII.

World War Two (WWII) CLIL – Elective Choice

The content of this study is exactly the same as the WWII unit. The difference is that it is delivered mainly in Italian and is suitable for all of the Year 9 CLIL students. Students who have an average of A to A+ in Year 9 Italian and are enthusiastic about taking on the CLIL challenge in Year 10 may select this as their Humanities choice. (CLIL - Content and Language Integrated Learning Methodology).

Civil Rights and the Law – Elective Choice

The study of Civil Rights and the Law has two distinct topics that are covered during the Semester. The areas that will be covered include:

- Legal Studies - Students examine courts and parliament as sources of law in Australia. The role of the courts in the legal system is discussed along with the methods used to resolve disputes. Students investigate the differences between criminal and civil law.
- Civil Rights - Students consider the need for civil rights and how effectively civil rights have been implemented in Australia and worldwide. Activists such as Nelson Mandela, Martin Luther King and the emergence of Freedom Rides in Australia along with the Aboriginal activist Eddie Mabo are studied.



The World of Business – Elective Choice

The study of the World of Business has three distinct topics that are covered during the Semester. The areas that will be covered include:

- Economic Performance - students will be introduced to economic terms such as demand, supply and opportunity cost. Economic principles including inflation, economic growth and recession are studied.
- Work and Work Futures - students will also research how different jobs have evolved over time and the types of occupations that will be in demand in the future due to changes in technology and society.
- Business Management and Accounting - students will investigate the role of entrepreneurs in the business environment and will have some exposure to business record keeping and basic accounting.



Our Crowded Earth – Elective Choice

The study of Our Crowded Earth has two distinct topics that are covered during the Semester. The areas that will be covered include:

- Geographies of Human Wellbeing – students will investigate the factors that contribute to human wellbeing and formulate solutions on how to improve the wellbeing of people in developing countries.
- Environmental Management – students will study the factors that cause changes in our natural environment. They will discuss the impacts of these changes to land, people and culture and study different approaches on how to manage the environment more ethically and efficiently.



VCE Accounting

Accounting is an information system providing financial and other information for making and evaluating decisions about the management of resources. It plays an integral role in the successful operation and management of a small business.

Students will study theoretical and practical aspects of Accounting and develop skills in calculating, recording and reporting events to support more effective decision making. The accounting information will be collected and applied, using both manual and information technology methods.

It is a recommended subject for any student interested in a career in Business, Finance, Commerce or Hospitality / Tourism. It is strongly recommended that students complete Units 1 and 2 before attempting Units 3 and 4.

Unit 1 - 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. Students analyse, interpret and evaluate the performance of the business using financial and non-financial information. Students record financial data and prepare reports for a service businesses owned by sole proprietors.

Areas of Study include:

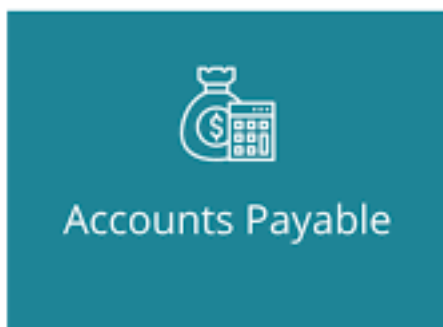
- The role of accounting
- Recording financial data and reporting accounting information for a service business

Unit 2 - Accounting and decision-making for a trading business

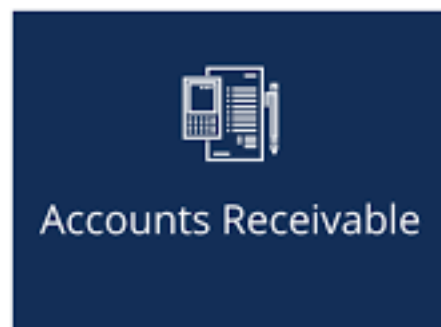
In this unit, students develop their knowledge of the accounting process for sole proprietors operating a trading business. Students use manual processes and ICT, including spreadsheets, to prepare historical and budgeted accounting reports. Students analyse and evaluate the performance of the business 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 and suggest to the owner strategies to improve business performance.

Areas of Study include:

- Accounting for inventory
- Accounting for and managing accounts receivable and accounts payable
- Accounting for and managing non-current assets



vs.



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. They interpret reports and information presented in a variety of formats and suggest strategies to the owner to improve the performance of the business.

Areas of Study include:

- Recording and analysing financial data
- Preparing and interpreting accounting reports

Unit 4 Recording, reporting, budgeting and decision-making

In this unit, 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. 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. They investigate both the role and importance of budgeting in decision-making for a business. They analyse and interpret accounting reports and graphical representations to evaluate the performance of a business. From this evaluation, students suggest strategies to business owners to improve business performance.

Areas of Study include:

- Extension of recording and reporting
- Budgeting and decision-making



VCE Business Management

This study examines the various types of business organisations that operate within Australia and the ways in which people manage them. Students will study different sized firms, from the very small owner/manager type to the large corporation. This study is a perfect introduction to the world of business and to any business course offerings a student may wish to undertake. It also provides a wealth of knowledge to students as they take on future employment.

Unit 1 Planning a business

In this unit, students will be introduced to businesses of all sizes and their contributions to the economic and social wellbeing of a nation. Students will investigate the conditions under which new business ideas can emerge and how to make them a reality. Students will explore the factors affecting business ideas, the internal and external environments within which businesses operate, and the effect these environments have on planning a business.

Areas of Study include:

- The business idea
- External environment
- Internal environment

Unit 2 Establishing a business

In this unit, students will focus on the establishment phase of a business's life, including, complying with legal requirements, making decisions about how best to establish a system of financial record keeping, staffing the business, establishing a customer base and marketing the business and its products or services.

Areas of Study include:

- Legal requirements and financial considerations
- Marketing a business
- Staffing a business



Unit 3 Managing a business

In this unit, students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students consider corporate culture, management styles, management skills and the relationship between each of these. Students investigate strategies and theories to manage both staff and business operations to meet objectives.

Areas of Study include:

- Business foundations
- Managing employees
- Operations management

Unit 4 Transforming a business

In this unit students study a theoretical model to undertake change and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance. They investigate the importance of leadership in change management. Using a contemporary business case study from the past four years, students evaluate business practice against theory.

Areas of Study include:

- Reviewing performance – the need for change
- Implementing change

VCE Classical Studies

Classical Studies is the study of Ancient Greece and Ancient Rome. These cultures have contributed to modern cultures in many ways. Areas such as literature, art, history and social structures will be studied. Therefore, the focus is on all aspects of these societies and how they are significant to our own present-day society.

As with the History courses, Classical Studies is a great preparation for many careers and will help you to develop many skills. Furthermore, it is an exciting time to revisit Ancient Greece and Rome, their Gods and Goddesses, myths and legends.

Unit 1 Mythical Worlds

This unit explores the nature of myths and legends, for example, the Trojan War. Students will examine myths and study ideas such as the concept of the hero. Students will explore the manner in which myths and legends are represented in oral tradition, art, architecture, drama and literature. Students will also evaluate the ideals and values of the classical societies compared to our own. The focus is on Ancient Greece.

Areas of Study include:

- Gods, heroes and monsters
- Myths and archaeology
- Myths in classical cultures

Unit 2 Classical Worlds

This unit explores the emergence of classical societies and their cultures from mythological to historical explanations of the world. Students study how societies developed a variety of ways to structure their world and express the culture of their society. Students are also encouraged to see how classical works extend beyond antiquity into the present. The focus is on Ancient Greece.

Areas of Study include:

- Society through culture
- Classics through time



Unit 3 Classical works

Units 3 & 4 focus on Ancient Rome. Students will examine the social and historical context of Rome as well as Rome's ideas, issues and values through its literature and art.

This study could include:

- An exploration of Latin literature including authors such as Virgil and Tacitus
- An introduction to Roman art and architecture including the Colosseum
- An exploration of the roles of men and women

Areas of Study include:

- Individual study
- Comparative study

Unit 4 Classical works

Units 3 & 4 focus on Ancient Rome. Students will examine the social and historical context of Rome as well as Rome's ideas, issues and values through its literature and art.

This study could include:

- An exploration of Latin literature including authors such as Virgil and Tacitus
- An introduction to Roman art and architecture including the Colosseum
- An exploration of the roles of men and women

Areas of Study include:

- Individual study
- Comparative study



VCE Economics

Economics is the study of how resources are allocated to meet the needs and wants of society. It attempts to explain how and why individuals behave the way they do and the consequences of their decision making. Studying Economics enables students to gain valuable insight into the economic problems that they may face on an individual basis and collectively as a society to meet the needs and wants of citizens, and may therefore assist them in making more informed and responsible decisions.

Unit 1 The behaviour of consumers and businesses

In this unit students explore their role in the economy, how they interact with businesses and the way economic models and theories have been developed to explain the causes and effects of human action. Students examine how individuals might respond to incentives and how technology may have altered the way businesses and consumers interact.

Areas of Study include:

- Thinking like an economist
- Decision making in markets

Unit 2 Contemporary economic issues

In this unit students focus on the possible trade-off between the pursuit of growth in incomes and production and the goal of environmental sustainability and long-term economic prosperity. Students explore how the benefits of economic growth are shared in an economy. They evaluate the role of government intervention in markets and discuss whether achieving greater equality causes a decline in economic growth and average living standards.

Areas of Study include:

- Economic growth, long-term economic prosperity and environmental sustainability
- Economic efficiency and equity
- Global economic issues

Unit 3 Australia's economic prosperity

In this unit students investigate the role of the market in allocating resources and examine the factors that are likely to affect the price and quantity traded for a range of goods and services. Students consider contemporary issues to explain the need for government intervention in markets and why markets might fail to maximise society's living standards. Students also investigate the importance of international economic relationships in terms of their influence on Australia's living standards.

Areas of Study include:

- An introduction to microeconomics: the market system, resource allocation and government intervention
- Domestic macroeconomic goals
- Australia and the world economy

Unit 4 Managing the economy

In this unit, students develop an understanding of how the Australian Government can alter the level of demand and the achievement of domestic macroeconomic goals. Students examine the role of the Reserve Bank of Australia (RBA) with a focus on its responsibility to alter the cost and availability of credit in the economy and discuss how the changes to interest rates can affect the level of demand in the economy.

Areas of Study include:

- Aggregate demand policies and domestic economic stability
- Aggregate supply policies

VCE Geography

VCE Geography is designed around two key themes: interconnection and change. The study of Geography is a structured way of exploring, analysing and understanding the characteristics of places that make up our world. Geographers investigate the changing pattern of places using a range of geographical resources and skills. Through the use of key geographic ideas students will observe, describe, explain, and analyse patterns of phenomena which affect places at or near the Earth's surface. Along with practical class work activities, fieldwork plays an important part in the study of Geography.

Unit 1 Hazards and disasters

In this unit, students undertake an overview of hazards before investigating two contrasting types of hazards and the responses to them by people. Students examine the processes involved with hazards and hazard events, including their causes and impacts, human responses to hazard events and interconnections between human activities and natural phenomena. Students undertake field work in this unit.

Areas of Study include:

- Characteristics of hazards
- Response to hazards and disasters

Unit 2 Tourism

In this unit students investigate the characteristics of tourism, with particular emphasis on where it has developed, its various forms, how it has changed and continues to change and its impacts on people, places and environments. The study of tourism at local, regional and global scales emphasises the interconnection within and between places. Students undertake fieldwork in this unit.

Areas of Study include:

- Characteristics of tourism
- Impact of tourism

Unit 3 Changing the land

This unit focuses on two investigations of geographical change: change to land cover and change to land use. Students investigate the distribution, causes and impacts of three processes that are changing land cover in the world. At a local scale, students investigate land use change using appropriate fieldwork techniques and secondary sources.

Areas of Study include:

- Land use change
- Land cover change

Unit 4 Human population – trends and issues

In this unit students investigate the geography of human populations. They explore the patterns of population change, movement and distribution, and how governments, organisations and individuals have responded to those changes in different parts of the world. Students examine the impact of population on people and places

Areas of Study include:

- Population dynamics
- Population issues and challenges

VCE History

History is the study of people and society. It is finding out about events and investigating why these events happened. The study of VCE History assists students to understand themselves, others and their world, and broadens their perspective by examining people, groups, events, ideas and movements. Through studying VCE History, students develop social, political, economic and cultural understanding. They also explore continuity and change: the world is not as it has always been, and it will be subject to change in the future. In this sense, history is relevant to contemporary issues. It fosters an understanding of human agency and informs decision making in the present. History helps us understand the world we live in and to question how the past is used in society today.

Units 1&2 focus is Twentieth Century history.

Units 3&4 focus is Australian history.

Unit 1 - Twentieth century history 1918–1939

This unit explores the major events, ideologies and movements of the period after World War One; the emergence of conflict; and the causes of World War Two.

Some of the areas examined are:

- The rise of political movements (such as the Nazis in Germany)
- The impact of the rise of political movements on the social life of a community
- A range of cultural expressions in the period (such as motion pictures and music)

Areas of Study include:

- Ideology and conflict
- Social and cultural change

Unit 2 - Twentieth century history 1945–2000

This unit focuses on significant changes that occurred in society during the second half of the twentieth century. From 1945 to 2000 the world has changed greatly. Borders of nations changed, technology raced ahead, and the nature of world trade changed, students explore the reasons for these changes and the impacts to society.

Some of the areas examined are:

- The major world views that have been important since 1945
- The outbreak of the cold war
- Some of the ways people can protest against prevailing views (by examining movements such as the Civil Rights movement in the USA)
- The representation of important events (such as the Vietnam War)

Areas of Study include:

- Competing ideologies
- Challenge and change



Unit 3 - Transformations: Colonial society to nation

In this unit, students explore the transformation of the Port Phillip District from the 1830's through to the end of the gold rush era in 1860. Students examine transformations in the way of life of the Aboriginal peoples and to the Australian environment. Students also study the type of society Australians tried to create in the early years of the federated nation.

Areas of Study include:

- The reshaping of Port Phillip District/Victoria, 1834–1860
- Making a people and a nation 1890–1920

Unit 4 - Transformations: Old certainties and new visions

In this unit, students investigate the continuing development of the nation in the early part of the twentieth century and the dramatic changes that occurred in the second part of the century. Students focus on one of the crises faced by the nation: The Great Depression 1929 - 1939 or World War Two 1939 - 1945. Students also explore social, economic and political changes that occurred in Australia in the second part of the century focusing on events such as the Vietnam War and Aboriginal land rights.

Areas of Study include:

- Crises that tested the nation 1929–1945
- Voices for change 1965–2000



VCE Australian & Global Politics

Global Politics is the study of the political, social, cultural and economic forces that shape interactions between states and other global actors in the contemporary world. It examines the interconnectedness of the contemporary global political arena and the impact of globalisation on culture, sovereignty, human rights and the environment. It examines the nature and power of key global actors and the types of power used by an Asia-Pacific state to achieve its national interests. It considers global ethical issues including human rights, people movement, development and arms control and explores the nature and effectiveness of global responses to crises such as climate change, armed conflict, terrorism and economic instability.

This subject is recommended for students who have excellent analytical and essay writing skills.

Global Politics is only offered as a Unit 3&4 subject.

Unit 3 Global actors

In this unit students investigate the key global actors of contemporary global politics. They use evidence to analyse the key global actors and their aims, roles and power. They develop an understanding of the key actors through an in-depth examination of the concepts of national interests and power as they relate to the state, and the way in which ONE Asia-Pacific state uses power to achieve its objectives.

Areas of Study include:

- Global actors
- Power in the Asia-Pacific

Unit 4 Global challenges

In this unit students investigate key global challenges facing the international community in the 21st century. They examine and analyse the debates surrounding two ethical issues that are underpinned by international law. They then evaluate the effectiveness of responses to these issues. Students also explore the context and causes of global crises and consider the varying effectiveness of responses and challenges to resolving them.

Areas of Study include:

- Ethical issues and debates
- Global crises



VCE Legal Studies

In Legal Studies, students learn how laws are made and also discover the connection between laws and our society, a connection which impacts on their enforcement and generates a need for change. Students have the opportunity to learn about their rights and responsibilities in society and their obligations under the law.

Further, students learn about our courts and tribunals and how disputes are resolved and also consider whether our law and the operation of the legal system is just. Legal Studies is an area of study that is relevant to every student's daily life and provides students with the opportunity to form opinions, hear opinions of others and formulate solutions.

Unit 1 - Guilt and liability

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

Areas of Study include:

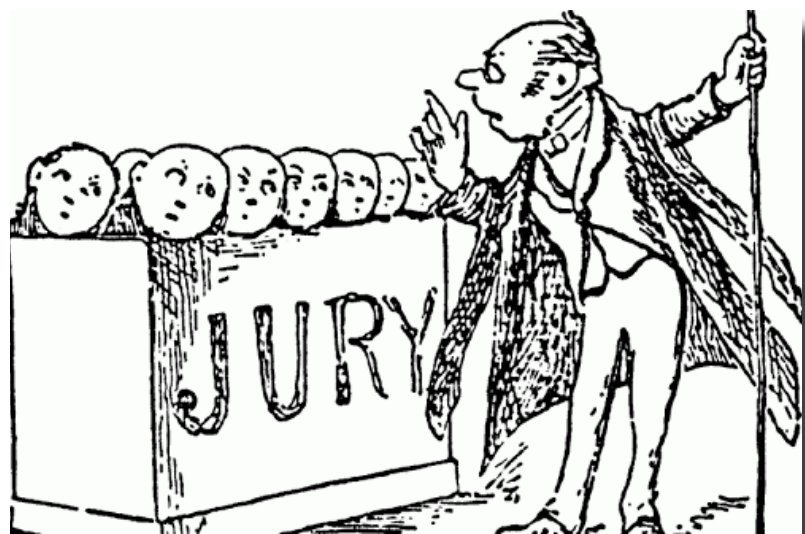
- Legal foundations
- The presumption of innocence
- Civil liability

Unit 2: Sanctions, remedies and rights

This unit focuses on the enforcement of criminal and civil law, the methods and institutions that may be used to determine a criminal case or resolve a civil dispute, and the purposes and types of sanctions and remedies and their effectiveness. Students undertake a detailed investigation of two criminal cases and two civil cases to form a judgement about the ability of sanctions and remedies to achieve the principles of justice. Students develop their understanding of the way rights are protected in Australia and in another country, and possible reforms to the protection of rights. They examine a significant case in relation to the protection of rights in Australia.

Areas of Study include:

- Sanctions
- Remedies
- Rights



Unit 3: Rights and justice

In this unit the students examine the Victorian justice system, with the focus on the criminal and civil justice systems. Students study the way the Victorian justice system achieves fairness, equality and access, aims to protect the rights of individuals and how it responds to reforms. Throughout this unit, students apply legal reasoning and information to actual and/or hypothetical scenarios.

Areas of Study include:

- The Victorian criminal justice system
- The Victorian civil justice system

Unit 4: The people and the law

In this unit, students explore how the Australian Constitution establishes the law-making powers of the Commonwealth and State Parliaments and protects the Australian people through structures that act as a check on parliament in law-making. Students investigate parliament and the courts, and the relationship between the two in law-making, and consider the roles of the individual, the media and law reform bodies in influencing law reform. Throughout this unit, students apply legal reasoning and information to actual scenarios.

Areas of Study include:

- The people and the Australian Constitution
- The people, the parliament and the courts



Digital Technologies: IT

Digital Technologies

My Program Rules

Creative IT

Game Development & Programming

Creative IT

Business IT

VCE Applied Computing

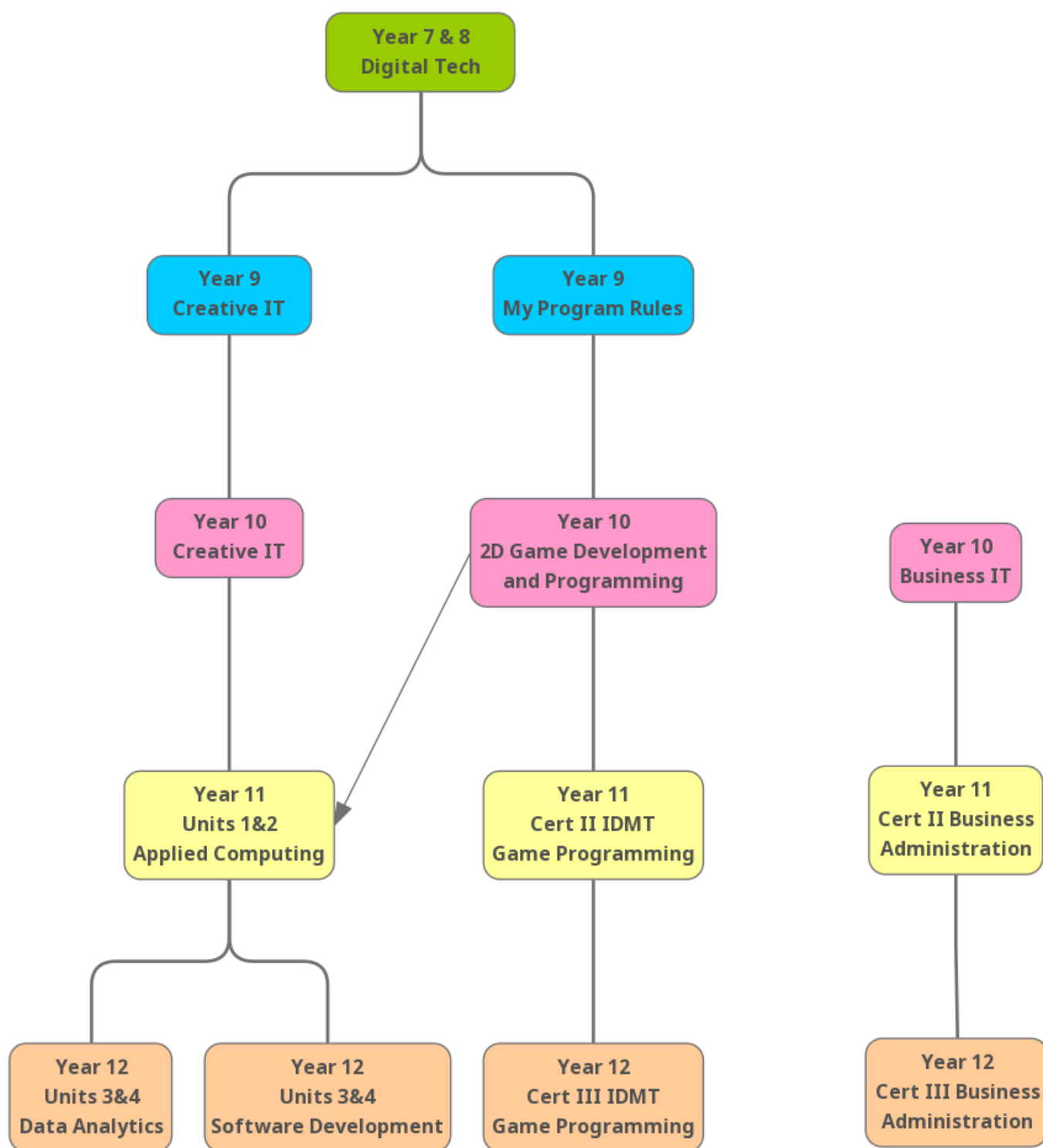
VCE Software Development

VCE Data Analytics

VET Certificate III in Information, Digital Media & Technology (Game Development)

VET Certificate II and III in Business Administration

Information Technology Pathways



Digital Technologies

Year 7 - 8

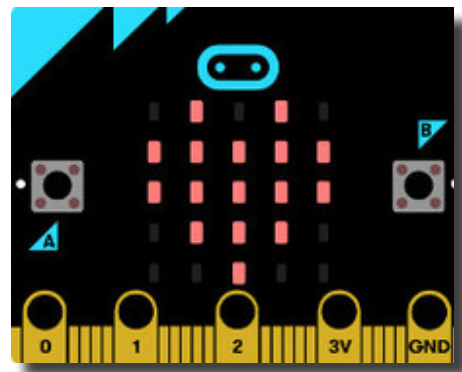
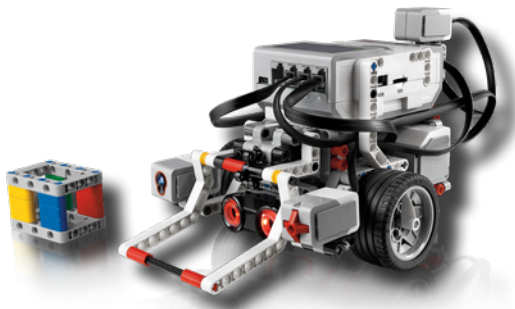
At Years 7 and 8, students will develop their digital skills and computer vocabulary by covering hardware, software and networks. They will investigate effective file management strategies, the benefits of backing up important data, and the binary representation of digital assets. They will enhance their problem-solving skills by looking at how digital technologies can be used to solve real world problems.

Year 7 Digital Technologies

- Computer Basics
- 3D Modelling
- Programming
- Image Manipulation

Year 8 Digital Technologies

- CAD
- Robotics
- Data Manipulation (Excel spreadsheets)
- Networking



Digital Technologies

Year 9

At Year 9, students select from 2 electives: My Program Rules and Creative IT. Students will investigate the role of hardware and software, analyse data to create information, and design and create interactive solutions.

Information Technology subjects in Year 9 are part of the Technology and Art electives. Students may select Creative IT and/or My Program Rules. Students in Year 9 need to complete at least one compulsory unit of Technology and they need to ensure they complete at least three units of Technology over Years 9 and 10.

Accelerated Studies

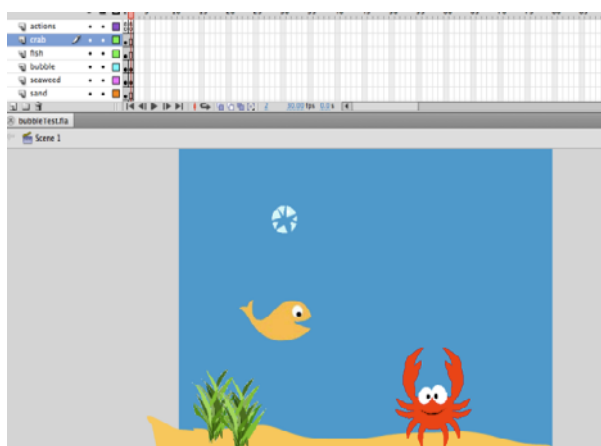
Students with strong academic performance in IT may begin Applied Computing Units 1 & 2 or VET Certificate III in IDMT (Game Programming) at Year 10.

Creative IT

This semester unit consists of learning how the computer can be used as a tool for making creative solutions. Skills and knowledge are developed in image manipulation and animation using Adobe Creative Suite, an industry standard software package. The binary representation of images and text, file formats, file compression, and screen resolution are all uncovered within this creative unit.

My Program Rules

This semester unit delves into the advances in robotics and artificial intelligence and consists of learning how a computer system can be used as a tool for making custom applications and games. Real-world problems will be decomposed, considering functional and non-functional requirements, to identify stakeholder needs. Algorithms will be designed, both diagrammatically and using structured English, then skills and knowledge are developed in controlling a robot and coding using an object-orientated programming language.



Digital Technologies

Year 10

The Year 10 IT curriculum has been designed to cater for a wide range of interests and abilities. Students will decompose real-world problems, considering functional and non-functional requirements, and will design and develop working solutions. They will analyse and visualise data to create meaningful information.

Information Technology subjects in Year 10 are part of the Technology electives. Students may select Creative IT and/or 2D Game Development & Programming and/ or Business IT.

Accelerated Studies

Students with strong academic performance in IT may begin Applied Computing Units 1 & 2 or VET Certificate III in IDMT (Game Programming) at Year 10.

Creative IT

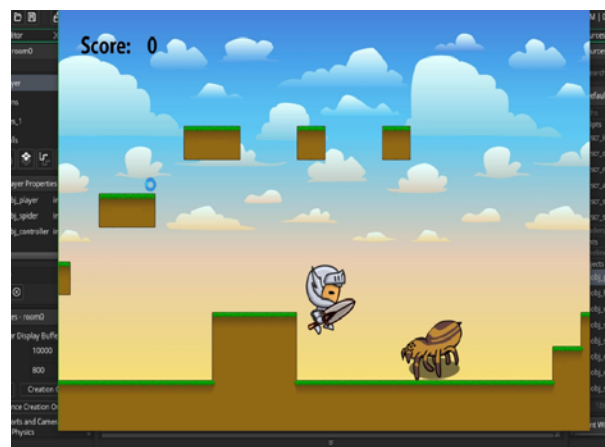
This semester unit consists of learning how the computer can be used as a tool for making creative solutions. Students will develop their skills and knowledge using the Adobe Creative Suite, an industry standard software package, to create advanced images, animation and/or video. They will analyse data from real-world problems and produce data visualisations. Students will investigate the role of 3D printing in industry and will design and print innovative 3D prototypes of their own.

Business IT

This semester unit consists of learning how computers are used to assist in the running and management of a business. Skills and knowledge are developed in web-development, spreadsheets and business documentation. Students will create solutions for sharing ideas and information online, considering social contexts and legal considerations.

2D Game Development & Programming

This semester unit consists of learning how the computer can be used as a tool to design and make retro 2D games and to develop modular programs. Skills and knowledge are developed in game creation using GameMaker in addition to programming in an object-oriented programming language. Relevant areas of the game development process are covered, including design and evaluation. Algorithms are designed diagrammatically and in structured English.



Digital Technologies

VCE

VCE Applied Computing focuses on the strategies and techniques for creating digital solutions and to manage the threats to data, information and software security. It examines information systems and how their interrelationships affect the types and quality of digital solutions. Students will acquire and apply knowledge and skills to use digital systems efficiently, effectively and innovatively when creating digital solutions such as data visualisations and modular programs. They will investigate legal requirements and ethical responsibilities with respect to the security and integrity of data and information. Through a structured approach to problem solving they develop an awareness of the technical, social and economic impacts of information systems.

VCE Applied Computing provides a pathway to further studies in areas such as business analysis, computer science, cybersecurity, data analytics and data science, data management, games development, ICT, networks, robotics, software engineering and telecommunications, and other careers relating to digital technologies.

Scored assessment at units 3&4 consists of 50% coursework and 50% examination.

Unit 1 - Applied Computing

In this unit students are introduced to the stages of the problem-solving methodology and will investigate how data is used within databases and spreadsheets to create data visualisations. They will also make use of a programming language to develop working software solutions.

In Area of Study 1, as an introduction to Data Analytics, students identify and collect data in order to present their findings as data visualisations. They present work that includes database, spreadsheet and data visualisations.

In Area of Study 2, as an introduction to Software Development, students use a programming language to create working software solutions.

Areas of Study include:

- Database, spreadsheet, and visualisation software
- Programming

Unit 2 - Applied Computing

In this unit students focus on developing innovative solutions for an opportunity that they have identified. They propose strategies for reducing security risks to data and information in networked environments.

In Area of Study 1 students work collaboratively to create an innovative solution in an area of interest. The innovative solution can be presented as a proof of concept, a prototype or a product.

In Area of Study 2 students investigate networks and the threats, vulnerabilities and risks to data and information. They propose strategies to protect the data accessed using a network.

Areas of Study include:

- Innovative solutions
- Network security

Unit 3 - Software Development

In this unit students apply the problem-solving methodology to develop working software modules using a programming language.

In area of study 1 students respond to teacher-provided solution requirements and designs to develop a set of working modules using a programming language. In area of study 2 students identify and analyse a real-world business need or opportunity and design a software solution.

Areas of Study include:

- Introduction to programming
- Designing a software solution

Unit 4 - Software Development

In this unit students focus on how the information needs of individuals and organisations are met through the creation of software solutions.

In area of study 1 students develop their preferred design from Unit 3 into a software solution using an object-oriented programming language. They undertake testing then evaluate the efficiency and effectiveness of the solution. In area of study 2 students examine the security practices of an organisation and the risks to software and data.

Areas of Study include:

- Programming and evaluating a software solution
- Cybersecurity: software security

Unit 3 - Data Analytics

In this unit students identify and extract data using software tools such as database, spreadsheet and data visualisation software to create infographics. Students develop an understanding of the analysis, design and development stages of the problem-solving methodology.

In Area of Study 1 students develop data visualisations and use appropriate software tools – including database, spreadsheet and data visualisation software - to present findings.

In Area of Study 2 students propose a research question, prepare a project plan, collect and analyse data, and design infographics or dynamic data visualisations.

Areas of Study include:

- Database software, spreadsheet software and data visualisation software.
- Data manipulation tool and visualisation tools

Unit 4 - Data Analytics

In this unit students determine the findings of a research question by developing infographics or dynamic data visualisations based on large complex data sets. The investigate security strategies used by organisations to protect data and information from threats.

In Area of Study 1 students develop their preferred design from in Unit 3 into infographics or dynamic data visualisations and evaluate the solutions and project plan.

In Area of Study 2 students investigate the security practices of organisations and examine the threats to data and information

Areas of Study include:

- Data visualisation tools
- Cybersecurity

VCE Certificate III in IDMT Game Programming (VET)

The VET IDMT Certificate III in IDMT (Game Programming) provides students with the knowledge and skills needed to develop games using Unity 3D. It is designed to introduce the many career opportunities available for programmers in games, interactivity and creative industries. The certificate has been developed by AIE (Academy of Interactive Education) and is intended to give participants an understanding of skills and techniques necessary to create a range of playable games. Game programmers drive the game development process, creating the framework, functionality and interaction in the game. Regarded as the essential ingredient in the development process, game programmers are highly valued and in demand.

This certificate is offered to students at Year 11 and is designed to be continued in Year 12. Students will have full completion of Certificate III at the end of Unit 4.

Students wishing to receive a study score for Units 3&4 must undertake scored assessment. Coursework tasks contribute to 66% to the overall score and the examination contributes 34%.

Year 11 Cert III in IDMT Game Programming

Modules:

- Game Programming in Unity 3D
- Diagnosing Systems
- Technical Design for Games

Year 12 Cert III in IDMT Game Programming

Modules

- Planning a 3D Game
- Networking and Maintenance
- Game Programming
- Designing User Interfaces
- Technical Support



VCE Certificate II & III in Business (VET)

The VET Certificate II in Business Administration provides students with the basic knowledge and skills of communication, teamwork, use of business technology, the processing of financial documents, and information handling. This provides an entry point into business and the commercial world. It is recommended for students wishing to gain employment in clerical or administrative roles across all industries.

Satisfactory completion for Units 1 to 4 is based on achievement of the set modules specified for each unit. Students could be assessed using the following: workbook; work performance task; case study; product creation; test; and examination.

This certificate is offered to students at Year 11 and is completed in Year 12 with students at this level undertaking modules from the Certificate III course for partial completion.

Students wishing to receive a study score for Units 3&4 must undertake scored assessment. Coursework tasks contribute to 66% to the overall score with the examination contributing 34%.

Year 11 Cert II in Business Administration

Modules

- Contribute to health and safety of self and others
- Work effectively with others
- Deliver a service to customers
- Organise and complete daily work activities
- Create and use spreadsheets
- Process and maintain workplace information
- Use digital technologies to communicate remotely
- Use business technology
- Communicate in the workplace
- Produce digital text documents

Year 12 Cert III in Business Administration (partial completion)

Modules

- Deliver and monitor a service to customers
- Design and produce business documents
- Organise personal work priorities and development
- Organise workplace information
- Recommend products and services

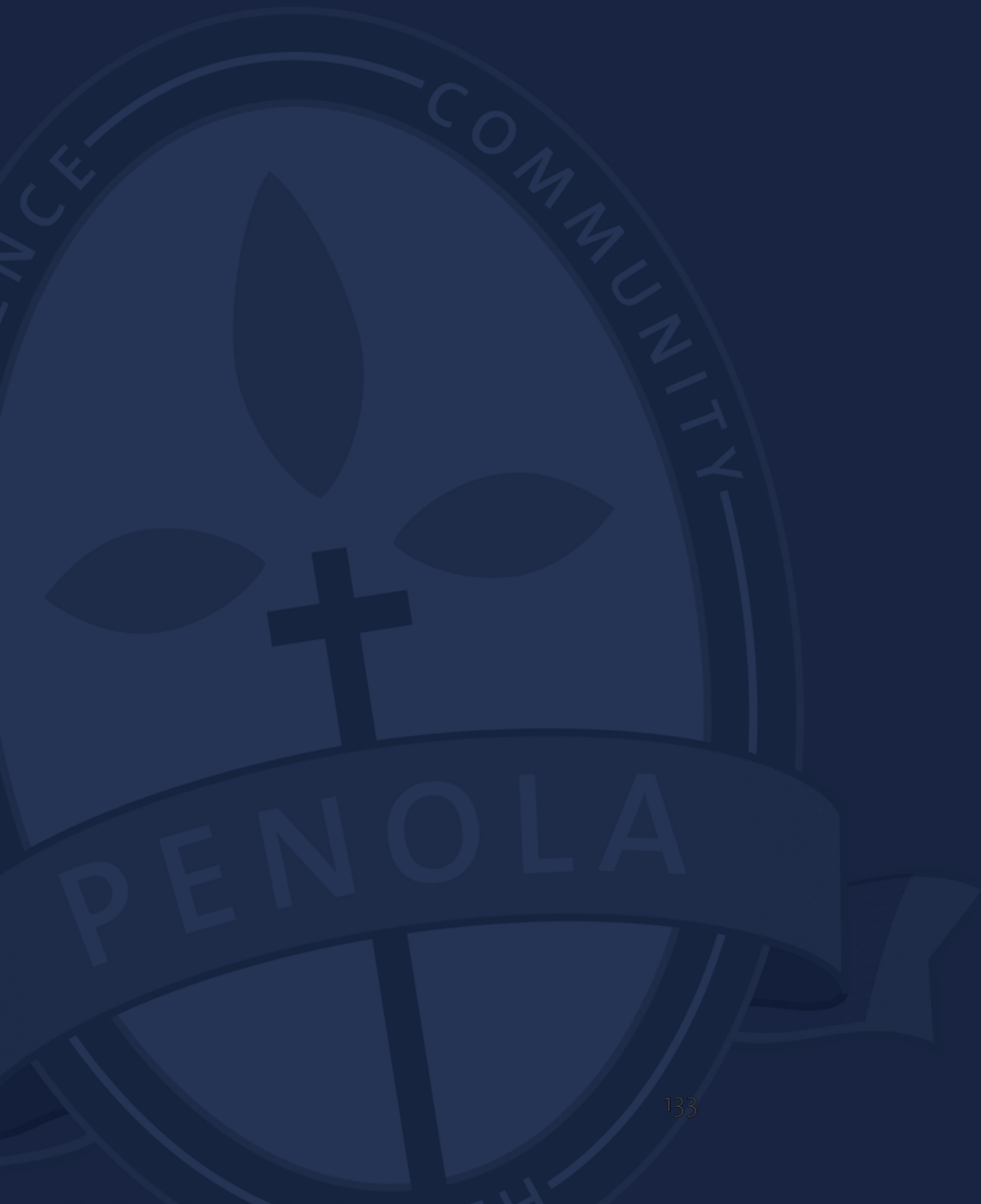
Languages

French

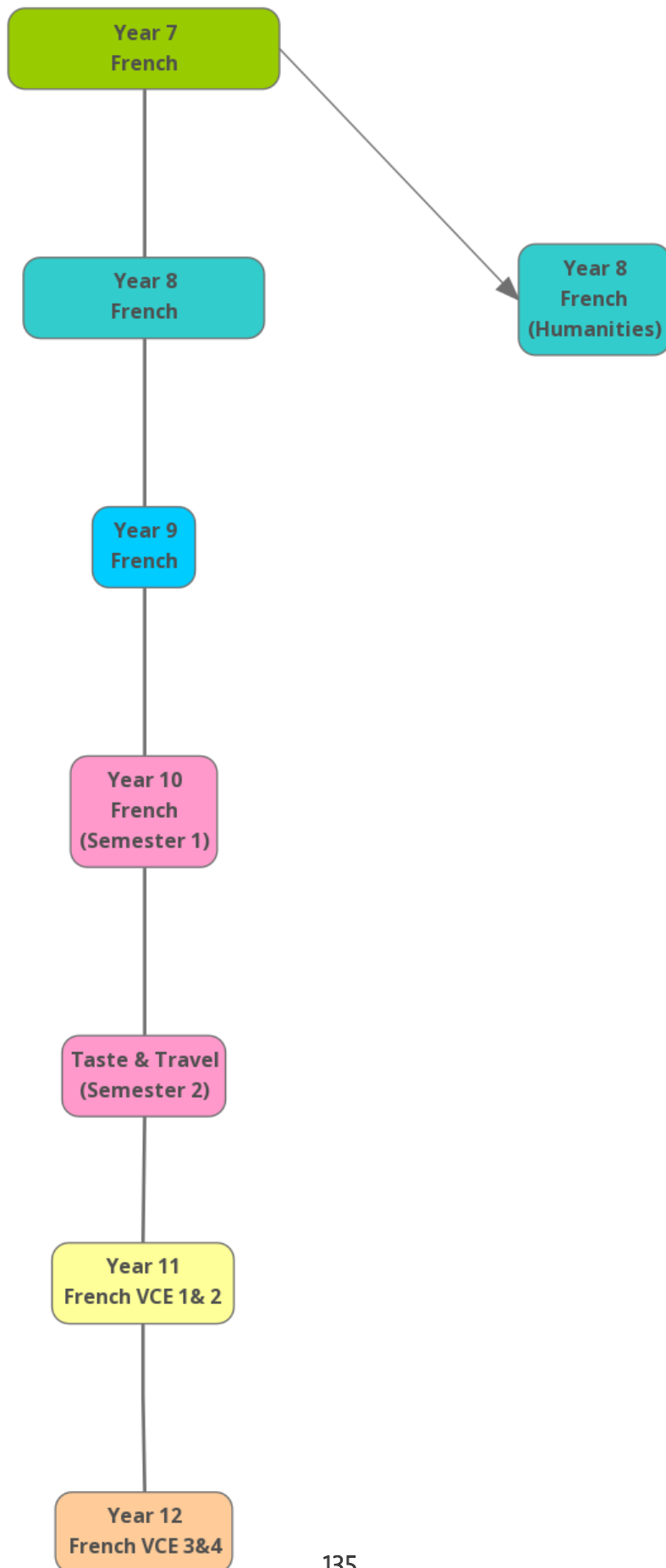
Italian

Japanese

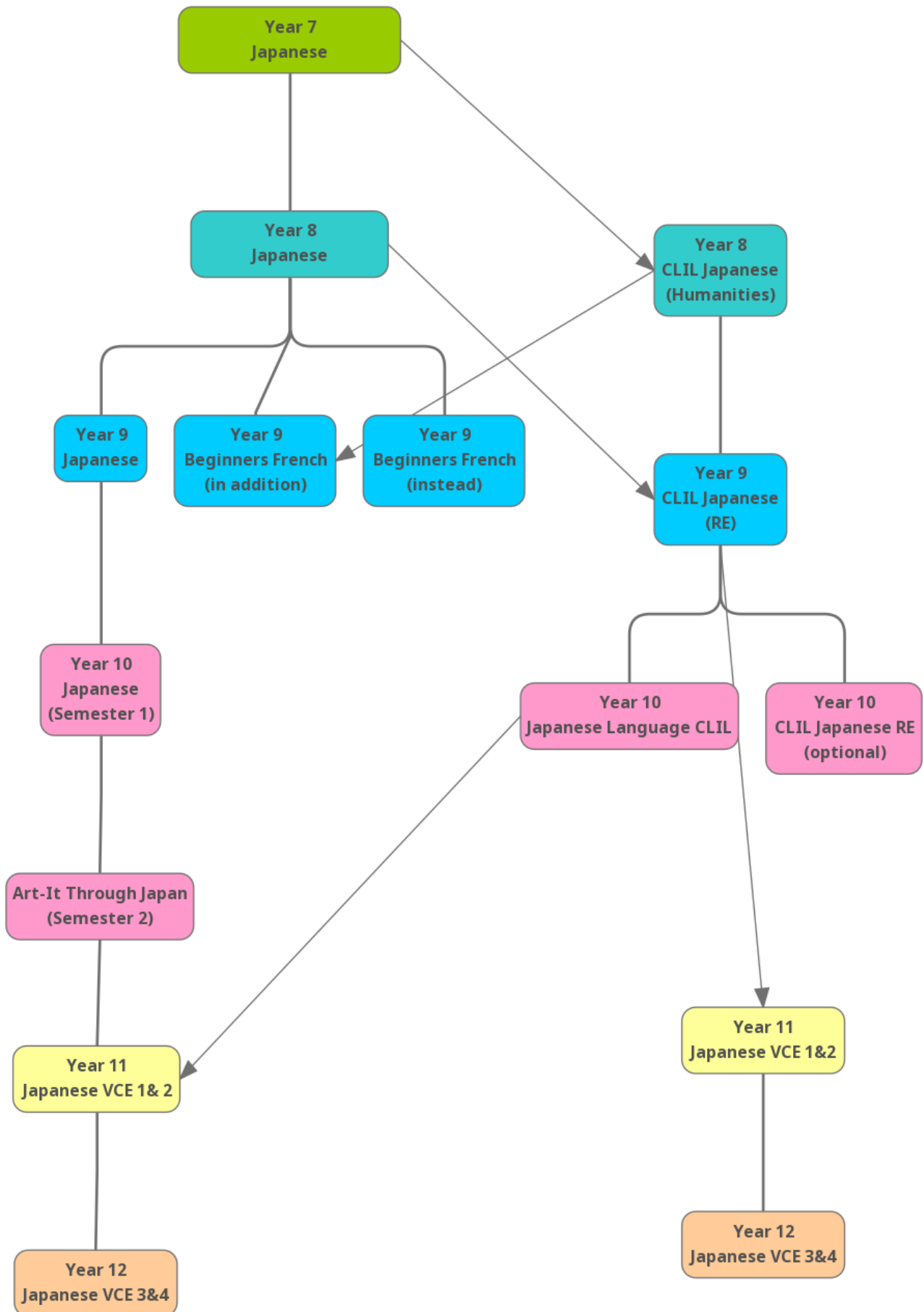
CLIL - Content and Language Integrated Learning



French Pathway



Japanese Pathway



Languages

Year 7 - 8

The study of Languages Other Than English opens our minds to opportunities and improved communication. Developing Listening, Speaking, Reading, Viewing and Writing skills, students learn to communicate in the language, which positively impacts on the development of Literacy and English. Students learn to appreciate and respect differing views and lifestyles, develop an increased awareness of multilingualism and multiculturalism in Australia and intercultural understanding and harmony.

At Year 7, students choose to study 2 of the Languages offered at the College. This choice should be based on interest and experience - some students may wish to experience an Asian and a European language; others might prefer to learn 2 European languages.

At Year 8, students choose one of the languages from year 7. They may choose to study in the Mainstream or through the CLIL options - a type of immersion experience where they study a core subject in the Language.

Year 7 French

Students will gain an insight into the language and culture of French speaking countries. Basic communication is developed through a range of topics such as:

- Bienvenue en France
- C'est beau, Paris

Year 7 Italian

Students will gain an insight into the language and culture of French speaking countries. Basic communication is developed through a range of topics such as:

- Buongiorno
- Di dove sei
- Tanti auguri

Year 7 Japanese

Students will gain an insight into the language and culture of French speaking countries. Basic communication is developed through a range of topics such as:

- Numbers
- Self-introduction
- Food
- Hiragana script



Year 8 French Mainstream

Students will further develop their skills and cultural appreciation of French and French-speaking countries. Communication is developed through topics such as:

- Family
- Describing people
- Animals
- Food
- School

Year 8 French CLIL

Students in Year 8 are offered the opportunity to integrate French and Humanities via CLIL Methodology. This enables students to become more competent, confident and proficient speakers of the language, whilst studying Humanities in a unique setting. Topics for French language and Humanities will be as per the Mainstream program. This option may allow students to accelerate their French studies and complete VCE French in years 10 and 11.

Year 8 Italian Mainstream

Students will further develop their skills and cultural appreciation of Italy and the Italian language. Communication is developed through topics such as:

- Family
- Friends
- Nature
- School
- Shopping
- Food

Year 8 Italian CLIL

Students in year 8 are offered the opportunity to integrate Italian with Religious Education and Humanities via CLIL Methodology. This enables students to become more competent, confident and proficient speakers of the language, whilst studying Humanities and R.E. in a unique setting. Topics for Italian language and Humanities will be as per the Mainstream program. This option may allow students to accelerate their Italian studies and complete VCE Italian in years 10 and 11.

Year 8 Japanese Mainstream

Students will further develop their skills and cultural appreciation of Japan and the Japanese language. Communication is developed through topics such as:

- Family
- Daily activities
- School
- Seasons and transport

Year 8 Japanese CLIL

Students in year 8 are offered the opportunity to integrate Japanese and Humanities via CLIL Methodology. This enables students to become more competent, confident and proficient speakers of the language, whilst studying Humanities in a unique setting. Topics for Japanese language and Humanities will be as per the Mainstream program. This option may allow students to accelerate their Japanese studies and complete VCE Japanese in years 10 and 11.

Languages

Year 9

Students develop understanding about the role of language and culture in communication. Their reflections on language use can be applied in other learning areas.

Learning languages broadens students' horizons about personal, social, cultural and employment opportunities, available in an increasingly interconnected and interdependent world. This interdependence requires people to negotiate experiences and meaning across languages and cultures. A bilingual or multilingual capability is normal in most parts of the world.

At Year 9, students generally continue the language chosen in year 8, either in Mainstream or through CLIL options. In 2021, Beginners French will be offered for students wanting to study TWO languages or wishing to change from their year 8 language. The language chosen at year 9 will be studied to the end of semester 1, year 10 (except for students who have chosen 2 languages and may wish to study only one in year 10).

French

Students continue to advance their skills and knowledge of the French language and culture via the development of the 5 skill areas – Listening, Speaking, Reading, Viewing and Writing. Topics to be presented include:

- School
- Routines
- Home Life
- Food

French CLIL (Religious Education)

Students in Year 9 are offered the option to take advantage of CLIL Methodology to combine French with Religious Education. Through the integration of French with RE, students will become more confident, competent and proficient in the language and will study Mainstream RE using a unique and different approach. On recommendation from their French teacher, students may then be offered the opportunity to accelerate and complete VCE French in years 10 and 11.

Accelerated Beginners French

1. Students wishing to study 2 Languages at Year 9 may elect to study French as an elective. This is an accelerated course which transfers students' knowledge and skills in studying one foreign language into the study of another. Students studying 2 Languages in Year 9 are not obliged to continue with both in Year 10.

2. For 2021, students may choose to select French instead of their Year 8 language (Italian or Japanese). Students transfer the skills learnt in another language to the study of French.

Topics include:

- Family and home life
- Describing people
- Food
- School and routines



Italian

Students continue to advance their skills and knowledge of the Italian language and culture via the development of the 5 skill areas – Listening, Speaking, Reading, Viewing and Writing.

Topics to be presented include:

- Daily life
- Family and food
- Pastimes
- Technology

Italian CLIL (Religious Education & Humanities)

Students selecting this option will combine Italian with RE and Humanities using CLIL Methodology.

Through the integration of Italian with Humanities and RE, students will become more confident, competent and proficient in the language and will study Mainstream Humanities and RE using a unique and different approach. On recommendation from their Italian teacher, students may then be offered the opportunity to accelerate and complete VCE Italian in years 10 and 11.

VCE Italian – Units 1 & 2

Students who have excelled in CLIL Italian in Year 9 may apply to accelerate to VCE Italian in Year 10. Students wishing to accelerate must possess a high level of maturity and ability to learn using a skill-based approach. Applications (from the perspective of ability and suitability to accelerate) will be reviewed by both the Italian teacher and the Head of Languages. Please refer to listing under VCE Italian for further information.

Japanese

Students continue to advance their skills and knowledge of the Japanese language and culture via the development of the 5 skill areas – Listening, Speaking, Reading, Viewing and Writing.

Topics to be presented include:

- Moving house
- Directions
- Katakana
- Food and shopping
- Seasons

Japanese CLIL (Religious Education)

Students who completed Year 8 CLIL Japanese will be able to continue to benefit from CLIL Methodology by combining Japanese with Religious Education. Through this integration of Japanese with RE, students will continue to become more confident, competent and proficient in the language while studying Mainstream RE using a unique approach. On recommendation from their Japanese teacher, students who did not study Japanese CLIL in year 8 may be permitted to join the course in year 9. Students in year 9 CLIL may then be offered the opportunity to accelerate and complete VCE Japanese in years 10 and 11.



Languages

Year 10

A bilingual or multilingual capability is becoming more important thanks to the international nature of world society. The global nature of the world requires people who can negotiate in other languages with cultural sensitivity. Learning languages broadens students' horizons about culture, personal and social domains, and employment within this increasingly interconnected and interdependent world. In recognition, Tertiary institutes are offering more opportunities for students to study part of their courses abroad.

In Semester 1, students continue with their Year 9 Language/s. Students may elect to continue to study a Language till the end of Year 10, thereby keeping options open for VCE courses. Semester 2 focuses on particular areas of interest to the students and is a prerequisite for VCE.

The exchange trips to Italy, France and Japan are offered to Years 10 and 11 full year language students every alternate year.

French (Semester 1)

Students who completed Year 9 Continuing or Accelerated Beginners' French will continue Mainstream French. They will be prepared for a range of language experiences to be used for social, cultural and employment purposes, under the following topics:

- Future plans
- Holidays

Taste & Travel French-Speaking Countries (Semester 2)

Did you know that French and English are the only 2 languages spoken on all continents? With close to 169 million French-speakers spread across the world, French is no doubt a language that counts.

Through this unit, students explore the cultural and gastronomic wonders of France and several other French-speaking countries such as Quebec, Belgium, Tahiti and Mauritius. Culture, sweets, cheeses, wines and the cooking of these French speaking countries will be explored and linked to their cultural homes, with a sampling of some of these foods provided.

Italian (Semester 1)

Students who completed Year 9 Mainstream (or CLIL Italian) may continue Mainstream Italian. They will be prepared for a range of language experiences to be used for social, cultural and employment purposes, under the following topics:

- Italianizziamoci (let's Italianise)
- Dreams and aspirations of young Italians

Italian Discovery – A Cultural and Gastronomic Journey through Italy (Semester 2)

Italian is one of the 6 most studied languages in the world, and Italy is one of the most visited countries. This unit will give students an understanding of why Italian food, language and culture are so appreciated throughout the world. Students will have the opportunity to explore the cultural and gastronomic wonders of Italy. The more popular Italian regions, including Veneto, Sicily and Lazio will be investigated for their culture, geography, history, art and their gastronomic wonders. Students may also be able to participate in some cooking whilst exploring the classic Italian dishes throughout the course.

What makes Italian Teenagers Tick? – Italian Entertainment & Lifestyle (Semester 2)

What would your teenage life be like if you had been born in Italy? In this unit, students will explore a variety of topics – the 4 M's - Motori (cars), Musica/Film (music & cinema), Movimento (sport) and Moda (fashion) which are currently popular in Italy, with specific reference to the lifestyle and tastes of a typical Italian teenager.

Italian CLIL (whole year)

Students who completed year 9 CLIL Italian are offered the option to continue to accelerate in year 10 and, if desired, continue to integrate Italian with RE (full year) and/or History (Semester 2). Topics for Italian will be negotiated, based on student interest.

Through continued acceleration in the language and optional integration with RE/History, students continue to become more competent, confident and proficient in the language, using a VCE skill-based approach to learning.

Year 9 Mainstream Italian students who have shown an exceptional level of proficiency in year 9 may be invited to join the Year 10 CLIL Language class.

CLIL – World War 2 History (Semester 2)

The content of this OPTIONAL study is the same as WW2 Mainstream Humanities. The content is delivered mainly in Italian and is suitable for students who have successfully completed Year 9 CLIL in the past with a high level of achievement and who are enthusiastic about taking on the CLIL challenge in Year 10. Study of this unit will satisfy the requirements for the number of Humanities units required. For more information about topics, please see the listing on the Humanities pages.

Japanese (Semester 1)

Students who completed Year 9 Mainstream (or CLIL Japanese) may continue Mainstream Japanese. They will be prepared for a range of language experiences to be used for social, cultural and employment purposes, under the following topics:

- School
- Homestay
- Part-time jobs

Art It Through Japan (Semester 2)

This unit focuses on exploring Japan through Anime, Music and a variety of Art styles such as Origami, Kirigami, Calligraphy, Ukiyo-e and manga. Students will learn about the various styles of art in Japan and may specialise in one aspect. In addition, several anime and/or Japanese bands may be selected as a medium to engage students in their learning of the Japanese language by exploring the influence of these media on Japanese audiences.

Japanese CLIL (whole year)

Students who completed year 9 CLIL Japanese are offered the option to continue to accelerate in year 10 and, if desired, continue to integrate Japanese with RE. Topics for Japanese will be negotiated, based on student interest.

Through continued acceleration in the language and optional integration with RE, students continue to become more competent, confident and proficient in the language, using a VCE skill-based approach to learning.

Year 9 Mainstream Japanese students who have shown an exceptional level of proficiency in year 9 may be invited to join the Year 10 CLIL Language class.

VCE French

Studying French contributes to student development in communication, intercultural understanding, mental abilities and literacy. Learning and using another language encourages students to examine the influences on society and consider issues for personal and international communication. Students examine the nature of languages and the role of culture in language, communication and identity. By understanding the process of language learning, students can apply skills to other contexts.

The study of French develops students' ability to understand and use a language which is widely learned and spoken internationally, an official language of world organisations and events. Communicating in French provides students direct access to the rich, varied culture of francophone communities. Further, language study exposes students to different experiences and perspectives. It encourages openness to different ways of thinking and interacting in the world.

French contributes to increasing your ATAR. It opens doors to many career pathways such as commerce, tourism and media.

Unit 1

VCE French focuses on student participation in interpersonal communication, interpreting the language of other speakers and presenting information and ideas in the language on a range of themes and topics. Students develop and extend Listening, Speaking, Reading, Viewing and Writing skills in a range of contexts, and develop cultural understanding in interpreting and creating the language.

The prescribed themes are:

1. The individual
2. The French speaking communities
3. The World around us

In Unit 1 Areas of Study are drawn mainly from the first 2 themes and include:

- My/French Families
- Youth in France
- What the Future holds

Unit 2

VCE French focuses on student participation in interpersonal communication, interpreting the language of other speakers and presenting information and ideas in the language on a range of themes and topics. Students further develop Listening, Speaking, Reading, Viewing and Writing skills in a range of contexts, and develop cultural understanding in interpreting and creating the language.

The prescribed themes are:

1. The Individual
2. The French speaking communities
3. The World around us

In Unit 2 Areas of Study are drawn mainly from all 3 themes and include:

- Environment
- Healthy Lifestyle
- Culture of French speaking countries

Unit 3

Unit 3 French focuses on student participation in interpersonal communication, interpreting the language of other speakers and presenting information and ideas in the language on a range of themes and topics. Students continue to master Listening, Speaking, Reading, Viewing and Writing skills in a range of contexts, and develop cultural understanding in interpreting and creating the language.

The prescribed themes are

1. The Individual
2. The French speaking communities
3. The World around us

In Unit 3 Areas of Study are drawn mainly from themes 2 & 3 and include:

- Deforestation
- Holiday Destinations
- Technology

Unit 4

Unit 4 continues to focus on student participation in communication, interpretation of language and presentation of information and ideas on the themes and topics. Students continue to perfect Listening, Speaking, Reading, Viewing and Writing skills, and develop cultural understanding in interpreting and creating the language. The study of a cultural product is included and forms the basis of 2 SACs and the Oral Examination.

The prescribed themes are

1. The Individual
2. The French speaking communities
3. The World around us

In Unit 4 Areas of Study are drawn from themes 2 & 3:

- Immigration
- Youth in Parisian suburbs



VCE Italian

Studying Italian contributes to student development in communication, intercultural understanding, mental abilities and literacy. Learning and using another language encourages students to examine the influences on society and consider issues for personal and international communication. Students examine the nature of languages and the role of culture in language, communication and identity. By understanding the process of language learning, students can apply skills to other contexts.

The study of Italian provides students with the ability to understand and use a language spoken in Italy, Switzerland and the European Union. Italian is also spoken by communities of Italian speakers who migrated to countries such as Australia, Argentina, Canada and America. It provides students with a direct means to access the rich and varied cultures of communities around the world which speak Italian.

Italian contributes to increasing your ATAR. It opens doors to many career pathways such as commerce, fashion, interpreting & translating.

Unit 1

VCE Italian focuses on student participation in interpersonal communication, interpreting the language of other speakers and presenting information and ideas in the language on a range of themes and topics. Students develop and extend Listening, Speaking, Reading, Viewing and Writing skills in a range of contexts, and develop cultural understanding in interpreting and creating the language.

The prescribed themes are:

1. The Individual
2. The Italian speaking communities
3. The World around us

In Unit 1 Areas of Study are drawn mainly from the first 2 themes and include:

- School life
- My/Italian families
- Italian History (Unification to end WW2)

Unit 2

VCE Italian focuses on student participation in interpersonal communication, interpreting the language of other speakers and presenting information and ideas in the language on a range of themes and topics. Students further develop Listening, Speaking, Reading, Viewing and Writing skills in a range of contexts, and develop cultural understanding in interpreting and creating the language.

The prescribed themes are:

1. The Individual
2. The Italian speaking communities
3. The World around us

In Unit 2 Areas of Study are drawn mainly from all 3 themes and include:

- Immigration
- Healthy Lifestyle
- Commedia dell'Arte

Unit 3

Unit 3 Italian focuses on student participation in interpersonal communication, interpreting the language of other speakers and presenting information and ideas in the language on a range of themes and topics. Students continue to master Listening, Speaking, Reading, Viewing and Writing skills in a range of contexts, and develop cultural understanding in interpreting and creating the language.

The prescribed themes are:

1. The Individual
2. The Italian speaking communities
3. The World around us

In Unit 3 Areas of Study are drawn mainly from themes 2 & 3 and include:

- Carnevale
- Renaissance Italy
- Technology

Unit 4

Unit 4 continues to focus on student participation in communication, interpretation of language and presentation of information and ideas on the themes and topics. Students continue to perfect Listening, Speaking, Reading, Viewing and Writing skills, and develop cultural understanding in interpreting and creating the language. The study of a cultural product is included and forms the basis of 2 SACs and the Oral Examination.

The prescribed themes are:

1. The Individual
2. The Italian speaking communities
3. The World around us

In Unit 4 Areas of Study are drawn from themes 2 & 3:

- Environment
- Work in Italy

VCE Japanese

Studying Japanese contributes to student development in communication, intercultural understanding, mental abilities and literacy. Learning and using another language encourages students to examine the influences on society and consider issues for personal and international communication. Students examine the nature of languages and the role of culture in language, communication and identity. By understanding the process of language learning, students can apply skills to other contexts.

The study of Japanese provides students with the ability to understand and use a language spoken by 128+ million people worldwide. It provides students with direct access to the rich traditional and popular cultures of Japan.

Japan has an increasing influence in Victoria through innovations in areas such as science, technology, design and the arts. Japanese contributes to increasing your ATAR and opens doors to many career pathways in areas such as tourism, hospitality, the arts, diplomacy, social services, commerce, translating and interpreting.

Unit 1

VCE Japanese focuses on student participation in interpersonal communication, interpreting the language of other speakers and presenting information and ideas in the language on a range of themes and topics. Students develop and extend Listening, Speaking, Reading, Viewing and Writing skills in a range of contexts, and develop cultural understanding in interpreting and creating the language.

The prescribed themes are:

1. The Individual
2. The Japanese speaking communities
3. The World around us

In Unit 1 Areas of Study are drawn mainly from the first 2 themes and include:

- My/Japanese Families
- Club Activities
- Tokyo Olympics

Unit 2

VCE Japanese focuses on student participation in interpersonal communication, interpreting the language of other speakers and presenting information and ideas in the language on a range of themes and topics. Students further develop Listening, Speaking, Reading, Viewing and Writing skills in a range of contexts, and develop cultural understanding in interpreting and creating the language.

The prescribed themes are:

1. The Individual
2. The Japanese speaking communities
3. The World around us

In Unit 2 Areas of Study are drawn mainly from all 3 themes and include:

- Japanese Festivals
- School
- Trends in Japan

Unit 3

Unit 3 Japanese focuses on student participation in interpersonal communication, interpreting the language of other speakers and presenting information and ideas in the language on a range of themes and topics. Students continue to master Listening, Speaking, Reading, Viewing and Writing skills in a range of contexts, and develop cultural understanding in interpreting and creating the language.

The prescribed themes are:

1. The Individual
2. The Japanese speaking communities
3. The World around us

In Unit 3 Areas of Study are drawn mainly from themes 2 & 3 and include:

- Leisure
- Travel in Japan
- Japanese Drama

Unit 4

Unit 4 continues to focus on student participation in communication, interpretation of language and presentation of information and ideas on the themes and topics. Students continue to perfect Listening, Speaking, Reading, Viewing and Writing skills, and develop cultural understanding in interpreting and creating the language. The study of a cultural product is included and forms the basis of 2 SACs and the Oral Examination.

The prescribed themes are:

1. The Individual
2. The Japanese speaking communities
3. The World around us

In Unit 4 Areas of Study are drawn from themes 2 & 3:

- Multiculturalism
- Global Warming



Science

Science

Energy matters

Atomic world and Eco-challenge

Atomic world and STEM Electricity

Chemistry - Chemical patterns

Biology - Genetics and evolution

Biology - Immunology and disease

Physics - Force, energy and motion

Psychology

Global Systems and the Universe

Forensic science

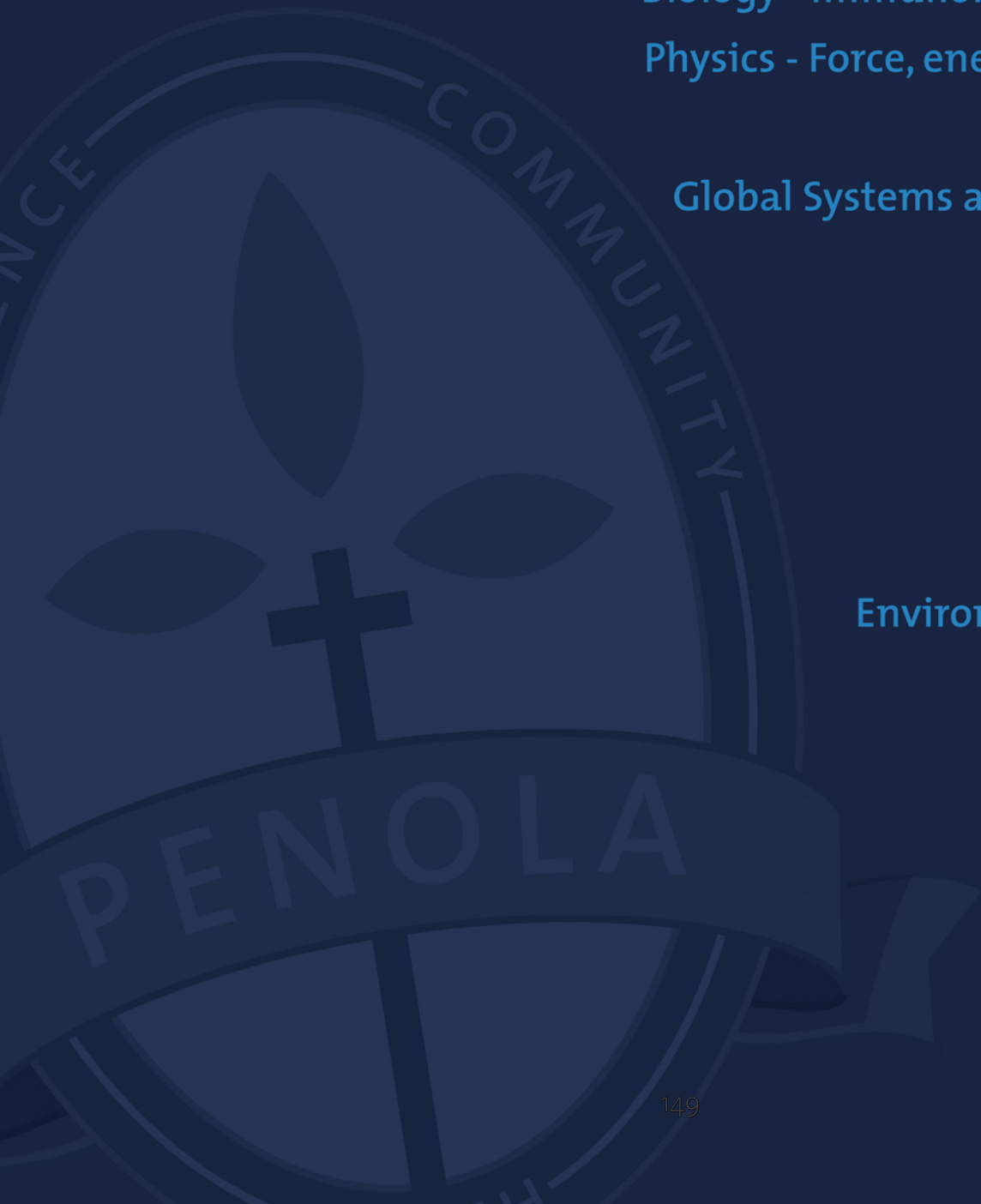
Chemistry

Biology

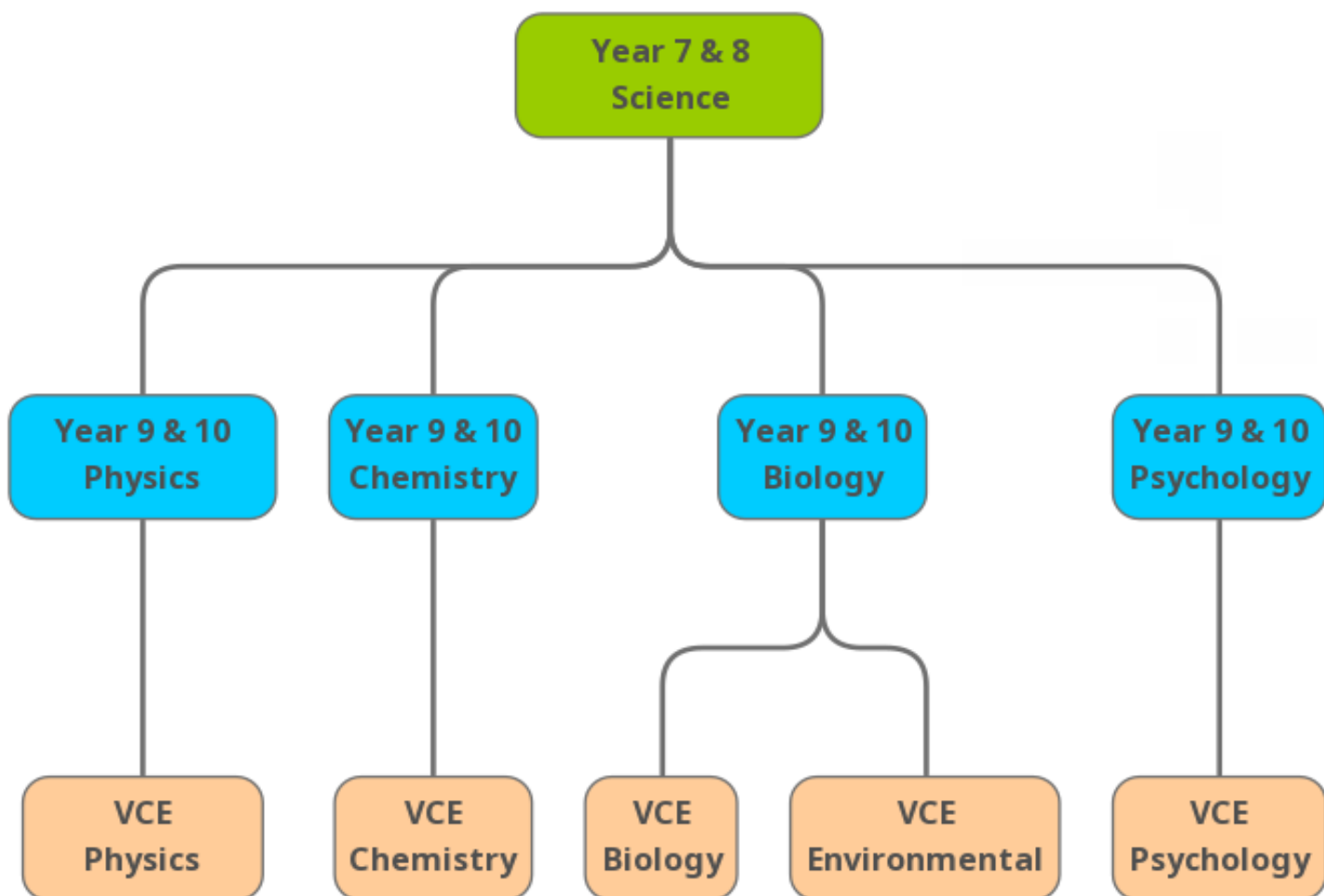
Physics

Psychology

Environmental Science



Science Pathways



Science

Year 7 - 8

At Penola Catholic College our science program provides opportunities for students to explore and explain the world around them.

Through a variety of science activities, students develop and apply scientific knowledge. Students use evidence to explain and predict events in the physical and biological world. Students apply the skills of scientific investigation and analysis and learn to use appropriate scientific language for a range of audiences. Students generate knowledge, refine solutions, ask questions and communicate scientific understanding through a range of activities.

Through the study of science students gain an understanding of the importance of Science and the work of scientists in the community.

This will assist students when making decisions about careers and further study.

Year 7 Science

- Chemical Science
- Biological Science
- Earth and Space Science
- Physical Science
- Topic Tests
- Practical Activities
- STEM Project

Year 8 Science

- Biological Science
- Chemical Science
- Earth and Space Science
- Physical Science
- Topic Tests
- Practical Activities
- STEM Project



Science

Year 9

Year 9 Science is semester based with the first semester being compulsory for all students. There are two elective subjects for Semester 2: Atomic world and Eco-challenge and Atomic world and Stem electricity.

Semester 1 covers the concept of energy through the three core science subjects of Physics, Chemistry and Biology. Students investigate how electrons orbit an atom, how these electrons can flow to create electricity through conductive materials and finally look at how energy flows through neurons sending signals to carry out functions in the body.

Semester 2 students will explore ions, isotopes and various types of chemical reactions followed by either an Eco- challenge or STEM unit. Eco-challenge explores the relationships between organisms and their ecosystems followed by a project-based learning task where students investigate ways to reduce human impact on these ecosystems. In the STEM unit students investigate battery power and they use explore microbial batteries in the project-based learning task.

Semester 1 - Energy Matters (Compulsory unit):

Exploration of energy through the three core sciences of Chemistry, Physics and Biology.

- Chemistry - Atoms are the basis of all matter. Exploration into the structure of atoms helps explain their properties and follows onto the formation of the periodic table.
- Physics - The outer electrons found in the atom can flow. Exploring the movement of these electrons in electric circuits allows students to respect the power of electricity.
- Biology - Electricity flows inside of us. Signals are sent throughout the body to keep it functioning and to help protect it. Exploration into how these electrical signals are sent and received will help students understand what reaction times are and how they play a part in things like driving a car.

Semester 2 - Atomic world:

Students will continue to investigate atoms, this time focussing on different versions of these atoms. Beginning with charged atoms (ions) and isotopes which explores radio-activity and why the nucleus of an atom is unstable. They will learn how to identify when a chemical reaction is taking place specifically focussing on heat and pH. Students will conduct many experiments including an extended practical investigation.

Eco-challenge:

Students will study ecosystem and how all living things are dependent on each other and their ecosystems. They will learn and model how energy enters the ecosystem through photosynthesis and the cycles of nature. They will explore how relationship between organisms are beneficial or detrimental and how introduced species can have an impact on the ecosystem. They will investigate how natural disasters and human activity can disrupt the ecosystem and how oil spills can damage our water ecosystems. Students will have an opportunity to design a campaign to tell people about how humans affect the environment around us and what we can do to make things better.

STEM electricity

Students will revisit electric circuits from first semester focussing on different types of batteries. They will explore and appreciate how advances in scientific understanding often rely on developments in technology and how technological advances are often linked to scientific discoveries. Students will revisit electric circuits focussing on a variety of power sources. They will investigate the different types of batteries including metal-air batteries and lead-acid batteries. Students will build their own electroscopes which detects electric charge. They will then use their knowledge of batteries to explore microbial fuel cells. They will present a project based on fuel cells at the Project based learning night.

Science

Year 10

The aim of year 10 is to provide a solid foundation of knowledge of the biological, chemical, physical, Earth and space sciences, including being able to select and integrate the scientific knowledge and methods needed to explain and predict phenomena, to apply that understanding to new situations and events, and to appreciate the dynamic nature of science knowledge. Five of the seven units will introduce students to the content covered in VCE subjects. These are:

- Biology - Immunology and Disease,
- Biology - Genetics and Evolution
- Chemistry - Chemical Patterns
- Physics - Force, Energy and motion
- Psychology

Students in Year 10 will select a Science for at least one semester from the seven strands. When listing preferences please keep in mind possible career choices and personal academic ability.

Immunology and Disease

This topic is a great subject to assist student wishing to study VCE Biology. Students will study how Multicellular Organisms rely on coordinated and interdependent internal body systems to respond to changes to their environment. Students will learn about pathogens; how they enter the body, how they cause disease and how our bodies fight these pathogens. They will investigate the response of the body to change as a result of the presence of pathogens invading our body.

Genetics and Evolution

Highly recommended for students who wish to continue with VCE Biology. In this unit, the students will study the transmission of inheritable characteristics from one generation to the next which involves Genes and DNA. They study the theory of evolution by natural selection which explains the diversity of things and is supported by a range of scientific skills. Students will learn the skills to analyse, firsthand & second-hand data and interpret graphs.

Force, Energy and Motion

Highly recommended for students who wish to continue with VCE Physics. Students learn the concept of energy conservation and represent energy transfers and transformation within systems. They apply relationships between force, mass and acceleration to predict changes in the motion of objects. Students will gather data to analyse everyday motions produced by forces, such as measurements of distance and time, speed, force, mass and acceleration.

Chemical Patterns

Highly recommended for students who wish to continue with VCE Chemistry. Students will study how atomic structure and properties of elements are used to organize the Modern Periodic Table. They will study groups of elements with similar properties and electronic structure in relation to their position on the Periodic table and investigate the chemical activity of some metals. Students will investigate a range of chemical reactions which produce useful everyday substances and the factors involved in different types of chemical reactions using chemical symbols to represent them. Students will learn the skills to analyse, firsthand & second-hand data and interpret graphs.

Psychology

Psychology is the scientific study of how people behave, think and feel. Psychologists study everything about the human experience from the basic workings of the human brain to consciousness, memory, reasoning and language to personality and mental health.

In this subject you will investigate the following topics:

What is psychology

- Understanding what psychology is and what psychologists do.
- Investigate and understand how research into human behaviour is undertaken through the scientific method.

What influences behaviour

- Identifying patterns of behaviour
- Exploring the psychology of lying and deception

What is mental health

- Understanding of the different approaches to describing what is considered to be normal behaviour.
- Exploring the terms mental health, mental health problems and mental disorders.
- Understanding the symptoms and treatment of major categories of mental disorders: mood disorders, psychotic disorders and anxiety disorders.

Global System and The Universe

Students learn about Rocks and minerals found on earth and how we use these in our daily lives. They explore the Earth's cycles (nitrogen, carbon, oxygen, phosphorus and water) and how these cycles work within the layers of the atmosphere. Students study the universe and the changing nature of features including galaxies, stars and solar systems with a focus on night skies. In learning how the Big Bang Theory can explain the origin of the Universe, they understand how scientific theories develop over time and must be supported by evidence. They also learn about space technology such as artificial satellites carrying space telescopes and how they are used to discover aspects of distant universe and explore whether there is 'other life out there'.

Forensics

Discover the underlying principles in chemistry, physics and biology associated with the intriguing world of Crime Scene Investigation. Explore how scientific principles reveal the hidden secrets of the criminal atrocities occurring in modern society. Throughout this course you will develop an understanding of topics such as Crime Scene Protocol (searching for evidence) Human Identification (fingerprint identification, DNA, blood analysis, anthropology, dental analysis) and Evidence Analysis (Fibres, hair, toxicology). This course endeavours to relate all theory to practical applications, exploring criminal case studies, allowing you to develop a sound understanding of the methods of forensic science.



VCE Biology

Biology is a diverse and evolving science discipline that seeks to understand and explore the nature of life, past and present. The study explores the dynamic relationships between organisms and their interactions with the non-living environment. It also explores the processes of life, from the molecular world of the cell to that of the whole organism, that maintain life and ensure its continuity. An important feature of undertaking a VCE Biology is the opportunity for students to engage in a range of inquiry tasks that may be self-designed, develop key science skills and interrogate the links between theory, knowledge and practice. VCE Biology provides for continuing study pathways within the discipline and leads to a range of careers. Branches of biology include botany, genetics, immunology, microbiology, pharmacology and zoology.

Unit 1 - How do living things stay alive?

Areas of Study include:

AOS 1 – How do organisms function?

In this unit, students are introduced to some of the challenges to an organism in sustaining life. Students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, and the requirements for sustaining cellular processes in terms of inputs and outputs.

AOS 2 - How do living systems sustain life?

They analyse types of adaptations that enhance the organism's survival in a particular environment and consider the role homeostatic mechanisms play in maintaining the internal environment.

AOS 3 – Practical investigation

The investigation requires the student to develop a question, plan a course of action to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data, organise and interpret the data and reach a conclusion in response to the question.

Unit 2 How is continuity of life maintained?

Areas of Study include:

AOS 1 – How does reproduction maintain the continuity of life?

In this unit, students focus on cell reproduction and the transmission of biological information from generation to generation. They examine the process of DNA replication and compare cell division in both prokaryotic and eukaryotic organisms. The role of stem cells in the differentiation, growth, repair and replacement of cells in humans is examined, and their potential use in medical therapies is considered.

AOS 2 – How is inheritance explained?

Students explore the relationship between genes, the environment and the regulation of genes in giving rise to phenotypes. They consider the role of genetic knowledge in decision making about the inheritance of autosomal dominant, autosomal recessive and sex-linked genetic conditions. In this context the uses of genetic screening and its social and ethical issues are examined.

AOS 3 – Investigation of an issue

A student-directed research investigation into, and communication of, an issue related to genetics and/or reproductive science is to be undertaken in Area of Study 3.

Unit 3 how do cells maintain life?

Areas of Study include:

AOS 1 – How do cellular processes work?

In this unit, students examine the chemical nature of the plasma membrane. They model the formation of DNA and proteins from their respective subunits. The expression of the information encoded in a sequence of DNA to form a protein is explored and the nature of the genetic code outlined. Students use the lac operon to explain prokaryotic gene regulation in terms of the 'switching on' and 'switching off' of genes.

Students learn why the chemistry of the cell usually takes place at relatively low, and within a narrow range of, temperatures. They examine how reactions, including photosynthesis and cellular respiration, are made up of many steps that are controlled by enzymes and assisted by coenzymes.

AOS 2 – How do cells communicate?

Students explore how cellular signals are sent and received throughout the body and across a species to communicate. They will look at invading pathogens, how the body detects them and the subsequent events that occur within the human body to combat them. They also learn about the importance of vaccinations on herd immunity and how developments in modern technology has allowed scientists to treat cancer.

Unit 4 How does life change and respond to challenges over time?

Areas of Study include:

AOS 1 – How are species related?

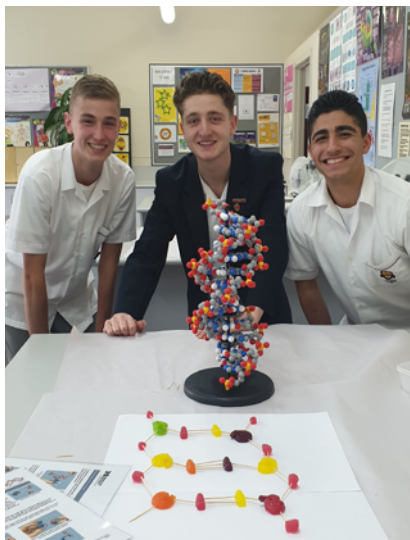
In this unit, students investigate the relatedness between species and the impact of various change events on a population's gene pool. Students examine change in life forms using evidence from palaeontology, biogeography, developmental biology and structural morphology. They explore how technological developments in the fields of comparative genomics, molecular homology and bioinformatics have resulted in evidence of change through measurements of relatedness between species.

AOS 2 – How do humans impact on biological processes?

The biological consequences, and social and ethical implications, of manipulating the DNA molecule and applying biotechnologies is explored for both the individual and the species.

AOS 3 – Practical Investigation

The investigation requires the student to identify an aim, develop a question, formulate a hypothesis and plan a course of action to answer the question and that complies with safety and ethical guidelines. The student then undertakes an experiment that involves the collection of primary qualitative and/or quantitative data, analyses and evaluates the data, identifies limitations of data and methods, links experimental results to science ideas, reaches a conclusion in response to the question and suggests further investigations which may be undertaken. The results of the investigation are presented in a scientific poster format.



VCE Chemistry

Chemistry explores and explains the composition and behaviour of matter and the chemical processes that occur on Earth and beyond. VCE Chemistry enables students to explore key processes related to matter and its behaviour. Students consider the relationship between materials and energy through four themes: the design and composition of useful materials, the reactions and analysis of chemicals in water, the efficient production and use of energy and materials, and the investigation of carbon-based compounds as important components of body tissues and materials used in society. Successful completion of VCE Chemistry forms the basis for tertiary studies in many courses such as Medicine, Dentistry, Pharmacy, Chemical Engineering, Nursing, Laboratory Technician and many more.

Unit 1 How can the diversity of materials be explained?

Areas of Study include:

AOS 1 – How can knowledge of elements explain the properties of matter?

This unit examines the development and structure of the Periodic Table, which provides a unifying framework for studying the chemistry of the elements. The configuration of an element and the internal structure of the atom can all be linked to the position of an element in the Periodic Table. Different models of bonding between atoms and molecules are explored. These models are used to explain the different properties and uses of various materials.

AOS 2 – How can the versatility of non-metals be explained?

Students investigate and explain the properties of carbon lattices and molecular substances with reference to their structures and bonding, use systematic nomenclature to name organic compounds, and explain how polymers can be designed for a purpose.

AOS 3 – Research investigation.

Students undertake a research investigation relevant to one of the following ten options. A question from the list under each option may be selected or students may develop their own research question relevant to Area of Study 1 and/or Area of Study 2 in conjunction with their teacher. For the selected question, students outline, analyse and evaluate relevant evidence to support their conclusions.

Unit 2 What makes water such a unique chemical?

Areas of Study include:

AOS 1 – How do substances interact with water?

In this unit, students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis. Students examine the polar nature of a water molecule and the intermolecular forces between water molecules. They examine the properties of water and the gases of the atmosphere, and their importance in sustaining life on Earth.

AOS 2 – How are substances in water measured and analysed?

It investigates how chemistry is used to respond to the effects of human activities on our environment, including Algae blooms, salinity, acid rain, depletion of photochemical smog and global warming. This unit introduces new, cleaner and more efficient chemical processes that have been designed using green chemistry principles. Students explore the solvent properties of water in a variety of contexts and analyse selected issues associated with substances dissolved in water.

AOS 3 – Practical investigation

The investigation requires the student to develop a question, plan a course of action that attempts to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data (which may include collecting water samples), organise and interpret the data and reach a conclusion in response to the question.

Unit 3 How can chemical processes be designed to optimise efficiency?

Areas of Study include:

AOS 1 – What are the options for energy production?

In this unit, students explore energy options and the chemical production of materials with reference to efficiencies, renewability and the minimisation of their impact on the environment. Students compare and evaluate different chemical energy resources, investigate the combustion of fuels, energy transformations, and use stoichiometry to calculate the amounts of reactants and products and the amount of energy released.

AOS 2 – How can the yield of a chemical product be optimised?

In this area of study students explore the factors that increase the efficiency and percentage yield of a chemical manufacturing process while reducing the energy demand and associated costs.

Unit 4 How are organic compounds categorised, analysed and used?

Areas of Study include:

AOS 1 – How can diversity of carbon compounds be explained and categorised?

In this unit, students investigate the structural features, bonding, typical reactions and uses of the major families of organic compounds including those found in food. They process data from instrumental analyses of organic compounds to confirm or deduce organic structures and investigate key food molecules.

AOS 2 – What is the chemistry of food?

In this area of study students explore the importance of food from a chemical perspective.

AOS 3 – Practical investigation

The investigation requires the student to identify an aim, develop a question, formulate a hypothesis and plan a course of action to answer the question and that complies with safety and ethical requirements. The student then undertakes an experiment that involves the collection of primary qualitative and/or quantitative data, analyses and evaluates the data, identifies limitations of data and methods, links experimental results to science ideas, reaches a conclusion in response to the question and suggests further investigations which may be undertaken. Findings are communicated in a scientific poster.



VCE Physics

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

VCE Physics provides students with opportunities to explore questions related to the natural and constructed world. The study provides a contextual approach to exploring selected areas within the discipline including atomic physics, electricity, fields, mechanics, thermodynamics, quantum physics and waves. VCE Physics provides for continuing study pathways within the discipline and leads to a range of careers.

Unit 1 What ideas explain the physical world?

Areas of Study include:

AOS 1 – How can thermal effects be explained?

In this unit, students explore how physics explains phenomena, at various scales, which are not always visible to the unaided human eye. They examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain the world. Students consider thermal concepts by investigating heat, probe common analogies used to explain electricity and consider the origins and formation of matter. Students study and apply the thermodynamic principles related to heating processes.

AOS 2 – How do electric circuits work?

Students investigate and apply circuit models to DC devices and analyse how household electrical system can be made safe and efficient.

AOS 3 – What is matter and how is it formed?

In this area of study students explore the nature of matter, and consider the origins of atoms, time and space. They examine the currently accepted theory of what constitutes the nucleus, the forces within the nucleus and how energy is derived from the nucleus.

Unit 2 What do experiments reveal about the physical world?

Areas of Study include:

AOS 1 – How can motion be described and explained?

In this unit, students study the laws of motion. They apply and analyse these laws to real life situations. Students investigate the processes in transforming the 240V AC into low voltage regulated DC power supply.

AOS 2 - How can AC electricity charge a DC device?

Students investigate the processes involved in transforming the alternating current delivered by the electrical supplier into low voltage direct current for use with small current electrical devices.

AOS 3 – Practical investigation

The investigation requires the student to develop a question, plan a course of action that attempts to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data, organise and interpret the data, and reach a conclusion in response to the question.

Unit 3 How do fields explain motion and electricity?

Areas of Study include:

AOS 1 – How do things move without contact?

In this area of study students examine the similarities and differences between three fields: gravitational, electric and magnetic. Field models are used to explain the motion of objects when there is no apparent contact. Students explore how positions in fields determine the potential energy of an object and the force on an object. They investigate how concepts related to field models can be applied to construct motors, maintain satellite orbits and to accelerate particles.

AOS 2 – How are fields used to move electrical energy?

In this area of study students use empirical evidence and models of electric, magnetic and electromagnetic effects to explain how electricity is produced and delivered to homes. They explore magnetic fields and the transformer as critical to the performance of electrical distribution systems.

AOS 3 – How fast can things go?

In this area of study students use Newton's laws of motion to analyse relative motion, circular motion and projectile motion.

Unit 4 How are fields used to move electrical energy?

Areas of Study include:

AOS 1 – How can waves explain the behaviour of light?

Students will learn wave equation and the laws of refraction perform analysis of interference/diffraction patterns, and graphical analysis related to the photoelectric effect. Students will familiarize with the concepts of quantum mechanics in application to the light and matter duality.

AOS 2 – How are light and matter similar?

This unit focuses on light and matter. Students investigate properties of light, which was previously described as an electromagnetic wave, as they appear to exhibit both wave-like and particle-like properties.

AOS 3 – Practical investigation

Students complete an investigation to develop a question, formulate a hypothesis and plan a course of action to answer the question and that complies with safety and ethical guidelines. Students then undertake an experiment that involves the collection of primary quantitative data, analyse and evaluate the data, identify limitations of data and methods, link experimental results to science ideas, reach a conclusion in response to the question.



VCE Psychology

VCE Psychology enables students to explore how people, think, feel and behave through the use of a bio- psychosocial approach. As a scientific model, this approach considers biological, psychological and social factors and their complex interactions in the understanding of psychological phenomena. The study explores the connection between the brain and behaviour by focusing on several key interrelated aspects of the discipline: the interplay between genetics and environment, individual differences and group dynamics, sensory perception and awareness, memory and learning, and mental health.

VCE Psychology provides for continuing study pathways within the discipline and leads to a range of careers. Opportunities may involve working with children, adults, families and communities in a variety of settings such as academic and research institutions, management and human resources, and government, corporate and private enterprises. Fields of applied psychology include educational, environmental, forensic, health and sport.

Unit 1 How are behaviour and mental processes shaped?

Areas of Study include:

AOS 1 – How does the brain function?

In this area of study students examine how our understanding of brain structure and function has changed over time and how the brain enables us to interact with the external world around us. They analyse the roles of specific areas of the brain and the interactions between different areas of the brain that enable complex cognitive tasks to be performed. Students explore how brain plasticity and brain damage can affect a person's functioning.

AOS 2 – What influences psychological development?

In this area of study students explore how these factors influence different aspects of a person's psychological development. They consider the interactive nature of hereditary and environmental factors and investigate specific factors that may lead to development of typical or atypical psychological development in individuals, including a person's emotional, cognitive and social development and the development of psychological disorders.

AOS 3 – Student-directed research investigation

Students analyse the scientific evidence that underpins the research in response to a question of interest. They then communicate the findings of their research investigation and explain the psychological concepts, outline contemporary research and present conclusions based on the evidence.

Unit 2 How do external factors influence behaviour and mental processes?

Areas of Study include:

AOS 1 – What influences a person's perception of the world?

In this area of study students explore two aspects of human perception – vision and taste – and analyse the relationship between sensation and perception of stimuli. They consider how biological, psychological and social factors can influence a person's perception of visual and taste stimuli, and explore circumstances where perceptual distortions of vision and taste may occur.

AOS 2 – How are people influenced to behave in particular ways?

In this area of study students explore the interplay of biological, psychological and social factors that shape the behaviour of individuals and groups. They consider how these factors can be used to explain the cause and dynamics of particular individual and group behaviours, including attitude formation, prejudice, discrimination, helping behaviour and bullying.

AOS 3 - Student-directed practical investigation

In this area of study students design and conduct a practical investigation related to external influences on behaviour. The investigation requires the student to develop a question, plan a course of action to answer the question, undertake an investigation to collect the appropriate primary data, organise and interpret the data and reach a conclusion in response to the question.

Unit 3 How does experience affect behaviour and mental processes?

Areas of Study include:

AOS 1 – How does the nervous system enable psychological functioning?

In this area of study, students explore the role of different branches of the nervous system in enabling a person to integrate, coordinate and respond to internal and external sensory stimuli. They explore the specialised structures and functioning of neurons that allow the nervous system to transmit neural information.

AOS 2 – How do people learn and remember?

In this area of study students study the neural basis of memory and learning and examine factors that influence the learning of new behaviours and the storage and retention of information in memory. They consider the influence of biological, psychological and social factors on the fallibility of memory.

Unit 4 How is wellbeing developed and maintained?

Areas of Study include:

AOS 1 – How do levels of consciousness affect mental processes and behaviour?

In this area of study students focus on states of consciousness and the relationship between consciousness and thoughts, feelings and behaviours. Students consider the nature and importance of sleep and apply biological, psychological and social factors to analyse the effects of sleep disturbances on psychological functioning, including mood, cognition and behaviour.

AOS 2 – What influences mental wellbeing?

In this area of study, students examine what it means to be mentally healthy. They explore the concept of a mental health continuum and factors that influence this over time. Students apply a biopsychosocial approach to analyse mental health and mental disorder, and evaluate the factors that contribute to a person's mental state.

AOS 3 – Practical investigation

Students undertake an experiment that involves the collection of primary data, analyse and evaluate the data, identify limitations of data and methods, link experimental results to science ideas, reach a conclusion in response to the question and suggest further investigations which may be undertaken. Results are communicated in a scientific poster format.



VCE Environmental Science

Environmental science is an interdisciplinary science that explores the interactions and interconnectedness between humans and their environments and analyses the functions of both living and non-living elements that sustain Earth systems. In VCE Environmental Science, Earth is understood as a set of four interdependent systems: the atmosphere, biosphere, hydrosphere and lithosphere. The study explores how the relationships between these systems produce environmental change over a variety of time scales. Students investigate the extent to which humans modify their environments and the consequences of these changes in local and global contexts with a focus on pollution, biodiversity, energy use and climate change; they explore the conceptual, behavioural, ethical and technological responses to these changes.

Diverse areas of employment range from design, including landscape or building architecture, engineering and urban planning, environmental consultancy and advocacy, which may involve employment in air, water and/or soil quality monitoring and control, agriculture, construction, mining and property management and water quality engineering.

Unit 1 How are Earth's systems connected?

Areas of Study include:

AOS 1 – How is life sustained on Earth?

In this area of study students examine the processes and interactions occurring within and between Earth's four systems – the atmosphere, biosphere, hydrosphere and lithosphere – that affect the availability, accessibility and usability of these inputs for life

AOS 2 – How is Earth a dynamic system?

In this area of study students explore changes in systems that can occur over different time scales (short, medium or long term), have cyclic or unpredictable patterns, and can be caused by natural- or human-induced factors. They examine the flow of matter and energy in selected environmental events and phenomena with reference to natural and unpredictable or abrupt environmental changes in Earth's four systems. Students learn how environmental changes may be monitored and measured.

AOS 3 - Practical Investigation

In this area of study students design and conduct a practical investigation into the monitoring of ecosystems or their components and/ or change in ecosystems.

Unit 2 How can pollution be managed?

Areas of Study include:

AOS 1 – When does pollution become a hazard?

In this area of study students examine biotic and abiotic indicators of pollution in various environments. Using selected examples, they distinguish between pollutants that result in bioaccumulation, and air- or water-borne pollutants. Students explore the chemical and physical characteristics, sources and transport mechanisms of pollutants and consider how levels of safety standards are set.

AOS 2 – What makes pollution management so complex?

In this area of study, students investigate three pollutants of national or global concern. They explain how pollutants move through, and affect, the atmosphere, biosphere, hydrosphere and lithosphere, and compare treatment and management options for each pollutant. Students also explore the limitations of the categorisation of pollution as air, water and soil pollution.

AOS 3 – Case study

In this area of study students apply and extend their knowledge and skills to investigate a case study involving the management of a selected pollutant of local interest. Students prepare a communication that explains the relevant scientific concepts, identifies different management options including social, economic, legal and ethical implications, and presents a justified position on a preferred solution.

Unit 3 How can biodiversity and development be sustained?

Areas of Study include:

AOS 1 – Is maintaining biodiversity worth a sustained effort?

In this area of study students examine the categories of biodiversity, the role of biodiversity in sustaining ecosystems, the provision of ecosystem services for human well-being and the strategies employed to counteract threats, both natural and human induced, so as to maintain biodiversity in the short, medium and long term. Students investigate through field and practical activities how biodiversity is measured. They examine the effectiveness of management strategies in the context of a selected threatened endemic species, based on scientific evidence, to ensure sustainability of biodiversity.

AOS 2 – Is development sustainable?

In this area of study students examine the application of environmental science to sustainability and environmental management. They explore definitions of sustainability and consider how these may be interpreted and applied in addressing environmental issues. Students select one environmental science case study to be studied in depth.

Unit 4 How can the impacts of human energy use be reduced?

Areas of Study include:

AOS 1 – What is a sustainable mix of energy sources?

In this area of study students examine the concepts associated with the use of different forms of energy by human societies. Focus moves from understanding the relationship between the uses of local sources of energy to examining the global impacts of these uses, including consideration of the consequences over short, medium and long time scales.

AOS 2 – Is climate predictable?

In this area of study students investigate the astronomical, solar, and Earth systems and human-based factors that have altered important relationships between the energy, water and nutrient cycles, resulting in the enhanced greenhouse effect and climate change. They compare natural and enhanced greenhouse effects and their significance for sustaining ecological integrity.

AOS 3 – Practical investigation

Students undertake an experiment or sampling exercise that involves the collection of primary data, analyse and evaluate the data, identify limitations of data and methods, link experimental results to science ideas, reach a conclusion in response to the question and suggest further investigations which may be undertaken. Results are communicated in a scientific poster format.



Technology

Year 7 - 10

VCE Food Studies

VCE Product Design & Technology (Textiles)

VCE Product Design & Technology (Wood)

VCE Systems Engineering

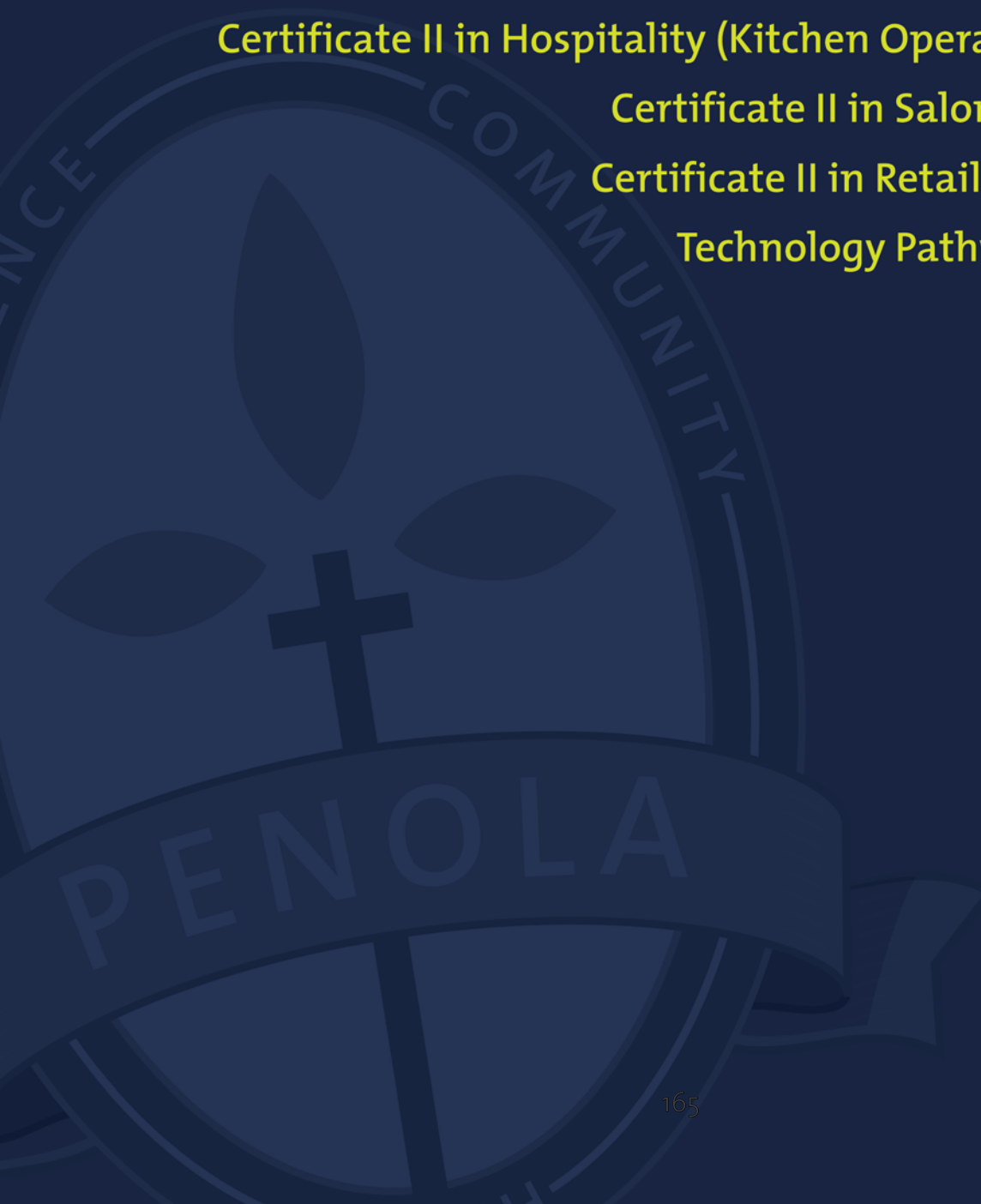
Certificate II in Engineering (VCE VET)

Certificate II in Hospitality (Kitchen Operations) (VCE VET)

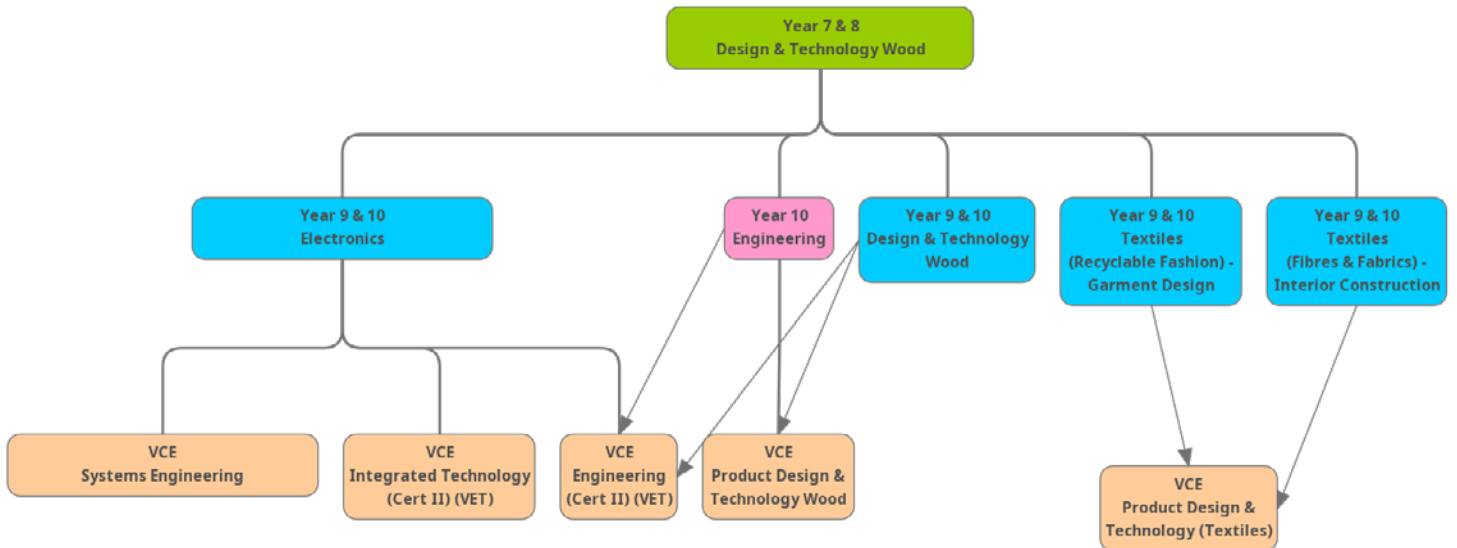
Certificate II in Salon Assistant (VET)

Certificate II in Retail Cosmetics (VET)

Technology Pathways Year 7 to 12

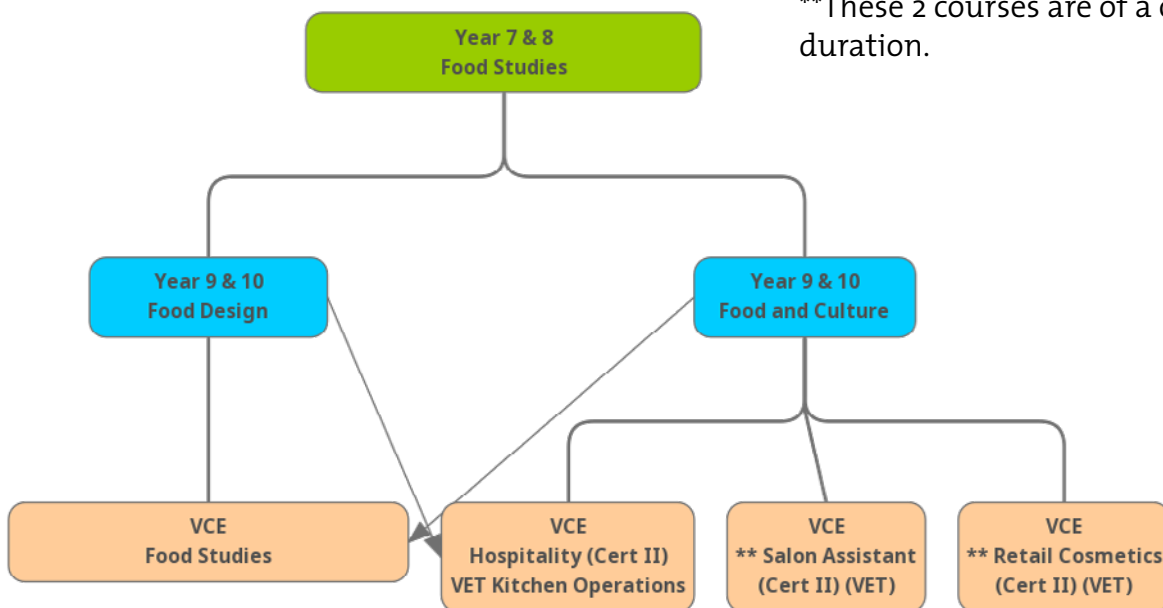


Technology Pathways



Please note: *Year 9 Students can apply to accelerate in any of the Year 11 Technology subjects on offer.

**These 2 courses are of a one year duration.



Technology

Year 7 - 8

Technology studies at Penola Catholic College involve the purposeful application of knowledge, experience and resources to create products and processes that meet human needs. It is important that students learn to use technology and learn about its power and scope as well as its limitations. They need to learn to be innovative in perceiving possible uses of technology to solve human problems, and to orient themselves towards the future with an awareness of the implications of these possibilities. With the appropriate knowledge and skills, students will be able to use technology in an efficient and responsible manner and thus, be better able to adapt to the rapid changes taking place in their career prospects, future work places and life styles. An understanding of the influences on, and limitations of, developments in technology will enable students to be better prepared to adapt to new applications of technology and to participate in controlling and monitoring their development. The Technology Learning Area explores the processes involved in production, regardless of what medium or material is chosen. Students will be working with equipment that complements their own skills development and enhances their knowledge of the area studied.

Year 7 & 8 Food Studies

All students complete a semester of Food Studies in Year 7 & 8. The students participate in units which introduce them to the functions of proper use of kitchen equipment. Students develop food skills, an understanding of nutrition, preparation and consumption.

In the second year, students broaden their knowledge of various food groups. They develop skills in the production process by safe use of tools and equipment in the kitchen preparing, cooking and final presentation.

Year 7 & 8 Design & Technology (Wood)

All students complete a semester of Design & Technology Wood in Year 7 & 8. The students are introduced to various timbers and plastics. They are involved in the design process and develop an understanding of simple construction techniques while considering safe working practices. In the second year, students further develop skills in this area to get a better understanding of construction techniques through the safe use of hand and power tools.



Technology

Year 9

Students are required to choose two Technology electives in Year 9. They may select from the following units:

- **Electronics**
- **Food Studies**
- **Textiles Technology**
- **Design & Technology (Wood)**

The choices made in Year 9 do not limit future choices in Years 10 and 11.

Points to note

There are no prerequisites for any Year 10 unit or any VCE unit in this learning area. Students who wish to study a second Language (Italian and French or Japanese and French) must select one Technology/Information Technology unit only.

Students select from the following subjects:

Electronics

In this unit, students will learn about circuit symbols, the purpose of electronic components and the use of multimeter to measure voltage and resistance in simple electronic models.

They will assemble, modify and evaluate basic electronic circuits based on one or two transistors. Students will also investigate the operation of a modern technological system.

Food Studies

This unit focuses on food, health and technology. Students will broaden their knowledge of food as a functional material in preserving, the study of the Food Groups, nutrition and fast foods. Students develop skills in the production process by safe use of tools and equipment in preparing a wide variety of foods.

Textiles Technology

Students have the opportunity to investigate the nature of textiles through designing and creating a variety of products. A creative approach to textiles is taken; this can range from visual merchandising, such as textiles used for window display, to interior design products such as lamps, screens, furniture coverings, body art and wearable art and costume. Emphasis is given to designing and accessing material to generate interesting ideas.

Design & Technology Wood

In this unit, students broaden their knowledge of the technology of various materials. Students further develop skills in an understanding of construction processes through the safe use of hand and power tools. The students will use materials such as wood and metal to design and manufacture products, models and/or prototypes to specifications and standards. They will use a range of appropriate techniques and equipment to specified degrees of accuracy and precision to make modifications when required.

Technology

Year 10

At Year 10, students begin to design their pathway to the future. The Technology learning area provides a wide range of opportunities for students to develop skills which relate to many industries. They can select from the following areas:

- Electronics
- Food and Culture
- Food Design
- Textiles Fibre and Fabrics
- Textiles Recyclable Fashion
- Design and Technology (Wood)
- Engineering

Penola Catholic College offers state of-the-art facilities and resources to support the broad range of Technology pathways on offer. The Year 10 Subjects are Semester units.

- The choices made in Year 10 do not limit future choices in Year 11.
- There are no prerequisites for any VCE units in this Learning Area.
- Students may also apply to accelerate in the VCE Technology subjects on offer.
- Students who are very interested in the Technology subjects can choose extra units from the free choices.

Food and Culture

In this unit, students are introduced to different cuisines from many countries around the world. Students will learn how to prepare, cook and serve a wide variety of food from other culture.

Food Design

This unit focuses on the creative area of food design and preparation. Students will establish skills in the construction of both savoury and sweet appetisers, to create “Cafe Style” themed assessment.

Design and Technology Wood

In this unit, students broaden their knowledge of the Technology of various materials, predominantly wood. Students develop skills and understanding of construction processes through safe use of hand and power tools. Students further develop problem-solving skills through the design and construction process.



Engineering

This unit is an introduction to VET Engineering and covers areas of understanding and interpreting technical drawings, machine processes and fabrication techniques. It also investigates Occupational Health and safety principles and using power tools for engineering related work activities. The study provides students with practical and theoretical skills to construct models from plans.

Textiles – Fibres and Fabrics

Students explore the concept of textiles through looking at textile fibre, printing and decorating and manipulation of a wide variety of textile materials. The idea of textiles in interior design, furniture, costume, dress and contemporary culture may be explored through design and production.

Textiles – Recyclable Fashion

In this unit, students will broaden their knowledge whilst using a variety of sustainable textiles materials. Students will develop the skills and understanding of the construction process through the safe use of the sewing machine and other textiles related equipment. Problem solving skills in design, deconstruction and construction will be developed through the investigation of recycled and up cycled theories in fashion to create a functional final product.

Electronics

In this unit, students will use basic tools to complete a series of electronic models. They will learn simple circuit theory enabling them to make simple calculations on voltage, current and resistance. They will use measuring instruments to test the operation of their models.



VCE Food Studies

VCE Food Studies examines the background to Australia's varied and abundant food supply, and explores reasons for our food choices. This study is designed to build the capacities of students to make informed food choices. Students develop their understanding of food while acquiring skills that enable them to take greater ownership of their food decisions and eating patterns.

The study is made up of four units:

Each unit contains two areas of study.

Unit 1: Food origins

This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world. Students explore how humanity has historically sourced its food, examining the general progression from hunter-gatherer to rural-based agriculture, to today's urban living global trade in food. Students also investigate Australian indigenous food prior to European settlement and how food patterns have changed over time.

Unit 2: Food makers

In this unit students investigate food systems in contemporary Australia, exploring both commercial food production industries and food production in small-scale domestic settings. Students produce foods and consider a range of evaluation measures to compare their foods to commercial products.

Unit 3: Food in daily life

This unit investigates the many roles and everyday influences of food. Students explore the science of food – they consider the physiology of eating, the microbiology of digestion and appreciating food. Students also investigate how communities, families and individuals change their eating patterns over time and how our food values and behaviours develop within social environments.

Unit 4: Food issues, challenges and futures

In this unit students examine debates about global and Australian food systems. Students also investigate individual responses to food information and misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices. Students consider how to assess information and draw evidence-based conclusions, and apply this methodology to navigate contemporary food fads, trends and diets. Students' food production repertoire reflects the Australian Dietary Guidelines and the Australian Guide to Healthy Eating.



VCE Product Design & Technology (Textiles & Wood)

Design and Technology focuses on developing an understanding of the social, economic and environmental consequences of design choices and decision-making. Students develop skills to critically analyse the purpose, process and products associated with design and technological innovation and activity. They develop the ability to understand, communicate and develop creative solutions while using tools, resources and human capabilities to complete a task for a given context.

Unit 1 - Sustainable Product Redevelopment:

This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability. Students consider the sustainability of an existing product, such as the impact of sourcing materials, manufacture, distribution, use and likely disposal. Students consider how a redeveloped product should attempt to solve a problem related to the original product.

Unit 2 - Collaborative Design:

In this unit, students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. Teamwork encourages communication between students and mirrors professional design practice where designers often work within a multi-disciplinary team to develop solutions to design problems.

Unit 3 - Applying the Product Design Processes:

In this unit, students are engaged in the design and development of a product that addresses a personal, local, or global problem, or meets the needs and wants of a potential end-user/s. Design and product development and manufacture occur in a range of settings. An industrial setting provides a marked contrast to that one-off situation in a small cottage industry or school setting.

Unit 4 - Product Development and Evaluation:

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



VCE Systems Engineering

Systems Engineering is concerned with designing solutions to practical problems by integrating knowledge of science, electronics, mechanics and mathematics with technical and practical application. Systems Engineering also involves the use of advanced testing and measurement to ensure that products perform as expected. It aims to help you to create, use and control a variety of electro-technological systems such as: a power supply, alarm, remote control and robotic arm.

Unit 1 - Mechanical Systems:

The theoretical focus of Unit 1 is on mechanical fundamentals: force, energy, inclined planes, gears and levers. The practical focus is to design, plan, manufacture, test performance, diagnose faults and evaluate a functional system. In their investigation, students will focus on the impact of technological systems on the society and environment in which they operate.

Unit 2 - Electro-technological Systems:

The focus of Unit 2 in theory is on electro-technological engineering fundamentals such as: components functions and symbols, designing printed circuit boards, measuring and testing methods and tools, elementary fault finding, repair and maintenance in design and production, and the maintenance techniques in the production activities. In the investigation report students need to explain how new and emerging technologies, such as new materials, processes and methods of manufacture, alternative fuels and alternative energy sources provide advancement in technological systems such as microelectronics, nanotechnology, fuel cells, hybrid technology and new applications for materials. The future developments of new and emerging technology and likely effects on the design and function of a technological system will be also investigated.

Unit 3 & 4 - Integrated and Controlled Systems Engineering:

Units 3 and 4 focus on integrated and controlled systems. Students will be designing and producing an integrated technological system of their choice such as: a remote-controlled vehicle, an alarm system, a robotic arm or an automated green house. The diagnostic practices are related to the student's production work. The knowledge and skills of project management techniques, risk assessment and risk management, folio presentation is also required. The focus of Units 3 and 4 research is on the analysis and comparison of the environmental benefits and implications of using different energy sources and how specific energy sources affect the design, performance and use of technological systems.



Certificate II in Engineering (VET)

This TAFE Certificate II in Engineering covers 14 modules over the two years of VCE. All modules are completed at school, and a certificate will be granted on completion by Education Living. The Engineering Certificate will provide four units in the VCE Certificate and will be used in calculating the ATAR Score for tertiary selection. In addition to supporting TAFE and University applications, the certificate improves student access to Engineering and Manufacturing Apprenticeships as well as equipment assembly and sales positions. Some aspects of the course require on-the-job training, so students will have an optional two week work placement each year. This will occur in a two week block – the last week of a school term followed by the first week of school holidays. This VET program is an entry level training program for students wishing to pursue a range of occupations associated with the Engineering and Manufacturing Industries. It covers the four main areas of engineering - Mechanical, Fabrication, Electrical / Electronics, and Production - with an emphasis on Fabrication.

Year 11 Unit 1 & 2:

Modules

- Apply principals of Occupational Health & Safety in the work environment
- Use hand tools
- Select and interpret drawings and prepare three dimensional (3D) sketches and drawings
- Apply basic fabrication techniques
- Use power tools/hand held operations • Perform basic machining processes
- Report on a range of sectors in the manufacturing, engineering and related industries
- Perform metal machining operations

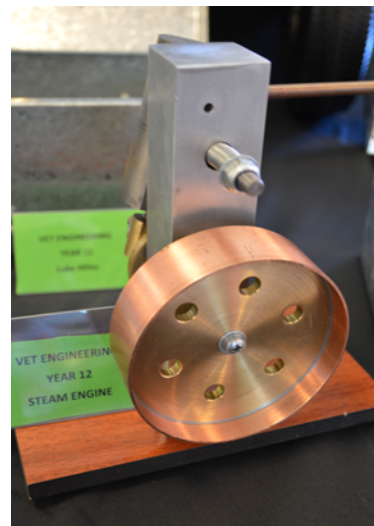
Additional VCE units may help deliver parts of the modules. eg: General Maths 1 and 2.

Year 12 Unit 3 & 4:

Modules

- Undertake a basic engineering project
- Perform intermediate engineering computations
- Produce basic engineering components & products using fabrication & machining operations
- Perform metal machining operations

Please note: Students who wish to study Engineering in Year 12, this subject covers one module of mathematics.



Certificate II in Hospitality (Kitchen Operations) (VET)

This TAFE Certificate II in Hospitality (Kitchen Operations) covers 14 modules of competence. The program aims to provide participants with knowledge and skills to achieve competencies that will enhance their employment prospects within a broad range of hospitality settings. All modules are delivered at the College. Inner Melbourne VET Cluster issues the certificate on completion. The course will provide four units on the VCE Certificate and can be used in the best four VCE studies for calculating the ATAR score for tertiary entrance. In addition to supporting TAFE and university applications, the Certificate improves student access to apprenticeships, traineeships and employment in restaurants, reception centres, sport and entertainment venues, hotels etc.

Year 11 Unit 1 & 2:

Modules

- Work effectively with others
- Prepare simple dishes
- Sources and use information on the hospitality industry
- Use hygienic practices for food safety
- Maintain the quality of perishable items
- Participate in safe work practices
- Use food preparation equipment
- Produce dishes using basic methods of cookery
- Clean kitchen premises and equipment

** Students are recommended to do one week of Work Placement as part of the course.

Year 12 Unit 3 & 4:

Modules

- Produce appetisers and salads
- Produce stocks, sauces and soups
- Produce vegetable, fruit, egg and farinaceous dishes
- Use cookery skills effectively
- Purchase goods

** Students are required to complete a minimum of 50 hours Work Placement in the College operated Restaurant “Stringybark” in Terms 2 & 3.



Certificate II in Salon Assistant (VET) Certificate II in Retail Cosmetics (VET)

Certificate II in Salon Assistant is only offered to Year 11 students and Year 10 students who are accelerating. All modules are delivered at school and after school hours to be completed during the course work. This course is designed to provide students with ability and knowledge to work in a Hairdressing salon or beauty industry. The opportunity to seek further information directly from the provider of this course can be organised during term 3. Please note as part of the course students are required to remain at school for **Salon Assistant or Retail Cosmetics classes until 5.00 pm once a week.**

Acquired knowledge:

The breadth, depth and complexity of knowledge and skills within these courses would prepare a person to perform in a range of varied activities. An individual achieving these levels of competencies would be able to:

- Demonstrate basic operational knowledge in a moderate range of areas
- Apply a defined range of skills
- Apply known solutions to a limited range of predictable problems
- Perform a range of tasks where choice between a limited range of options is required
- Assess and record information from varied sources
- Take limited responsibility for one's own output in work and training

Year 11 Unit 1 & 2 offered:

Some **modules** that will be covered:

- Contribute to health and safety of self and others
- Maintain and organise tools, equipment and work areas
- Design and apply make-up
- Greet and prepare clients for salon services
- Research and use hairdressing industry information



Certificate II in Retail Cosmetics only is offered to Year 11 students and Year 10 students who are accelerating. All modules are delivered at school and after school hours to be completed during the course work. This course is designed to provide students with ability and knowledge to work in a Hairdressing salon or beauty industry. This course provides students with training and assessment in the beauty industry. The opportunity to seek further information directly from the provider of this course can be organised during Term 3. Please note as part of the course students are required to remain at school for Salon Assistant or Retail Cosmetics classes until 5.00 pm once per week.

Acquired knowledge:

The breadth, depth and complexity of knowledge and skills within these courses would prepare a person to perform in a range of varied activities. An individual achieving these levels of competencies would be able to:

- Demonstrate basic operational knowledge in a moderate range of areas
- Apply a defined range of skills
- Apply known solutions to a limited range of predictable problems
- Perform a range of tasks where choice between a limited range of options is required
- Assess and record information from varied sources
- Take limited responsibility for one’s own output in work and training

Year 11 Unit 1 & 2 offered only:

Some modules that will be covered:

- Contribute to health and safety of self and others
- Communicate as part of a salon team
- Design and apply make-up
- Advise on beauty products and services
- Design and apply make-up for photography

