### YEAR 12 UNITS 3 & 4 CURRICULUM LEARNING PATHWAYS

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# Accounting Units 3 & 4

## Rationale
VCE Accounting focuses on the financial recording, reporting and decision-making processes of a sole proprietor small business. Students study both theoretical and practical aspects of accounting. Financial data will be collected and recorded, and accounting information reported, using both manual and information and communications technology (ICT) methods.

## Learning Focus
The Units focus on financial accounting for a single activity trading business as operated by a sole trader and emphasises the role of accounting as an information system. Students use the double entry system of recording financial data and prepare reports using the accrual basis of accounting. The perpetual method of stock recording with the First In, First Out (FIFO) method is also used. Students investigate the role and importance of budgeting for the business and undertake the practical completion of budgets for cash, profit and financial position. Students interpret accounting information from accounting reports and graphical representations, and analyse the results to suggest strategies to the owner on how to improve the performance of the business. Where appropriate, the accounting procedures developed in each area of study should incorporate the application of accounting principles and the qualitative characteristics of accounting information.

## Outcomes/Assessment
Students studying Accounting Units 3 and 4 will be expected to:
- Record financial data for a single activity sole trader using a double entry system, and discuss the function of various aspects of this accounting system. Record balance day adjustments and prepare and interpret accounting reports.
- Prepare budgets and variance reports, evaluate the performance of a business using financial and non-financial information and discuss strategies to improve the profitability and liquidity of the business.
- Record financial data using double entry accounting and report accounting information using an accrual-based system for a single activity sole trader, and discuss the function of various aspects of this accounting system.

## Accounting Curriculum Pathways
Pathways that may be of interest to students of Accounting Unit 3 and 4 include the pursuit of studies at tertiary level including the roles of Accountant, Banking and Finance, Economist, Marketing Manager, Operations Management, Industrial Relations Officer, Public Relations, International Trade, Hospitality and Tourism, Teacher, Administration.
**ACU EDUCATION**

<table>
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<td>ACU Education allows students to commence a University Bachelor of Education course as part of their Year 12 VCE course. It consists of two units, Contexts for Learning and Development and Understanding Learning. These units are designed to give an introduction into those things that promote or hinder student’s learning at school.</td>
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<td>Students look at the contexts for learning and development focusing on the fundamental concepts and theories within a critical reflective approach. Students deepen their understanding of children and school-aged young people as individual persons and members of social groups. All students will consider and critique a range of theories concerning the physical, cognitive and psychosocial aspects of development and will examine ideas and debates about the context of development with specific reference to family, childcare, school, peers, culture and diverse social contexts, as well as developmental differences and disabilities. Students develop the understanding of the learning theories, elements of pedagogy, teaching strategies and applications to curriculum design and teaching which are developed further in subsequent units.</td>
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<td>Students studying ACU Education will be expected to: Undertake assessment based on on-line exercises, class presentations, a case study and an examination. These tasks are designed to allow students to demonstrate significant knowledge of the material covered and the ability to apply it to real-life situations and further develop their interest in.</td>
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<td>Students in this subject may choose to continue with the Bachelor of Education course at the Australian Catholic University. ACU Education units are however accredited Nationally and so can be used for any number of Arts and Education degrees at any Australian University which offers those courses.</td>
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ART UNITS 3 & 4

Rationale
The VCE Art study recognises art as an integral part of our lives. Art is a potent and dynamic visual language through which we are able to communicate personal experiences, ideas, cultural values and beliefs. In both the process of making and examining art, students can realise the power to inspire change through imagination, creativity and innovation.

Learning Focus
In Unit 3 Art students study selected artists and use the Analytical Frameworks for interpreting and analysing the meaning of artworks. Applied together, these Analytical Frameworks help students to appreciate how an artwork may contain different aspects and layers of meaning. Students link their growing theoretical understanding of art to their own practice. Their art making is supported through investigation, exploration and application of a variety of materials and techniques. In Unit 4 students continue to develop personal points of view and informed opinions about art ideas or issues and support them with evidence. In relation to their developing artwork students continue to build upon ideas and concepts begun in Unit 3. They focus on the development of a body or folio of work that demonstrates creativity and imagination, the evolution of ideas and the realisation of appropriate concepts, knowledge and skills. A final set of completed art works is exhibited in the final College exhibition as a celebration of the year's work.

Assessments
Unit 3 Interpreting art / Investigation and interpretation through artmaking : Outcomes
Use of the Analytical Frameworks to analyse and interpret artworks : Theory
Explore personal ideas and concepts through a conceptual and practical investigation, including at least one finished artwork : Folio

Unit 4 Discussing and debating art/Realisation and resolution : Outcomes
Discuss and debate an art issue using selected artist/s works as context, with the support of selected commentaries and relevant aspects of the Analytical Frameworks : Theory
Progressively communicated ideas, directions and/ or personal concepts in a body of work, having used selected Analytical Frameworks to underpin reflections on their artmaking :Folio

Visual Arts Pathways
Art provides a foundation pathway which VCE students can use as a basis for further education and training involving arts learning at TAFE or Tertiary level. The Arts domain provides opportunities for students to create and critically explore visual culture, individual arts disciplines incorporating contemporary and traditional genres, and art works that involve the fusion of traditional techniques and new forms of multi-media.
**Rationale**
Biology is the study of living things from familiar, complex multicellular organisms that live in the many different habitats of our biosphere to single celled micro-organisms that live in seemingly inhospitable conditions. It is a study of the dynamic relationships between living things, their interdependence, their interactions with the non-living environment, and the processes that maintain life and ensure its continuity.

**Learning Focus**
In Unit 3 students consider the molecules and biochemical processes that are indicators of life. They investigate the synthesis of biomolecules and biochemical processes that are common to life forms. Students consider the universality of DNA and investigate its structure; the genes of an organism, as functional units of DNA and code for the production of a diverse range of proteins in an organism. Students investigate the role of proteins in cell functioning and how the structure of a protein relates to its function in an organism’s tissues, Students investigate how cells communicate with each other at molecular level in regulating cellular activities; how they recognise ‘self’ and ‘non-self’ in detecting possible agents of attack; and how physical barriers and immune responses can protect the organism against pathogens.

In Unit 4 students examine evidence for evolution of life forms over time. Students explore hypotheses that explain how changes to species have come about. In addition to observable similarities and differences between organisms, students explore the universality of DNA, and conservation of genes as evidence for ancestral lines of life that have given rise to the present biodiversity of our planet. Students study how genes are transmitted from generation to generation by examining meiosis and patterns of inheritance including pedigree analysis. Students consider the relationship between heritable variations and the environment in accounting for changes to species over time, and for speciation and extinction.

**Outcomes/Assessment**
The student’s level of achievement in Units 3 & 4 will be determined by school-assessed coursework and an end of year examination.

Unit 3 school assessed coursework will include a summary report of a practical activity on a biochemical process, a written report of a practical activity on the movement of substances across membranes, a summary report of a plant or animal response to stimuli and a presentation on one aspect of the immune response.

Unit 4 the school assessed coursework will include a summary report of a practical activity related to a genetic cross, a summary report of a practical activity on DNA manipulation, a written report on evolutionary relationships and a response to an issue related to an application of gene technologies.

**Biology Units 3 & 4 Pathways**
The study of biology prepares students for continuing studies in bioscience and entry into the workforce in a wide range of careers, including those not normally thought of as depending on bioscience. Much of our economic activity is generated through advances in bioscience research, in environmental, medical and associated biotechnologies, and in parallel sciences such as bioinformatics.
**BUSINESS MANAGEMENT UNITS 3 & 4**

**Rationale**
VCE Business Management examines the ways in which people at various levels within a business organisation manage resources to achieve the objectives of the organisation. Students develop an understanding of the complexity, challenges and rewards that come from business management and gain an insight into the various ways resources can be managed in small, medium and large-scale organisations.

**Learning Focus**
Students identify the important roles managers play in planning, organising, leading and controlling the various areas of the business, and in the operations function. Various management theories are considered and these are applied to real life business case studies. Students investigate how organisations are structured, the development of positive corporate culture, the application of management styles to various contexts, and skills necessary to be an effective manager in the 21st century. Effective strategies are investigated to effectively manage an organisation's most important resources; its employees. Two key aspects of this function are investigated; the employment cycle and employee relations. Significant change issues that students study include; corporate social responsibility, globalisation, technological development, privatisation, mergers and acquisitions.

**Outcomes/Assessment**
Students studying Business Management Units 3 and 4 will be expected to:
- Describe and analyse: the context in which large-scale organisations operate; major aspects of the internal environment of large-scale organisations.
- Identify and evaluate: practices and processes related to operations management, practices and processes related to human resource management.
- Analyse and evaluate the management of change in large-scale organisations.

**Business Management Curriculum Pathways**
Pathways that may be of interest to students of Business Management Unit 3 and 4 include the pursuit of studies at tertiary level including the roles of Marketing Manager, Operations Management, Industrial Relations Officer, Human Resource Management, Public Relations, International Trade, Banking and Finance, Hospitality and Tourism, Teacher, Administration.
CHEMISTRY UNITS 3 & 4

Rationale
The study of Chemistry is an investigation into the scope of techniques available to the analytical chemist. Chemical analysis is vital in the work of forensic science and the reaction pathways used in the preparation of organic compounds. By studying the production of chemicals, energy changes associated with chemical reactions and the use of alternative fuels, students will be informed of the importance of chemistry at work.

Learning Focus
Key knowledge and understanding of this subject includes the application of stoichiometry in volumetric and gravimetric analysis, principles and applications of spectroscopic and chromatographic techniques, the systematic nomenclature of organic compounds, the role of functional groups in reaction pathways as well as the type of bonding and structure of biomolecules such as DNA and proteins. Students will focus on key knowledge required to analyse the factors that determine the optimum conditions in the production of a selected chemical through the study of collision theory and reaction rate, the laws of equilibrium and principles of waste management used in the chemical industry. The comparison of energy sources and sustainability of natural resources are investigated and the energy which is generated through primary and secondary cells.

Outcomes/Assessment
Students studying Units 3 and 4 Chemistry will be expected to evaluate the suitability of techniques and instruments in the chemical analysis of a commercial product. Students will analyses the product to and determine the metal content using AAS, the protein content using the visible UV and types of fats and sugars using IR. The role of functional groups and the construction of reaction pathways using organic molecules will be essential in the preparation of an ester such as Aspirin. Students will analyse the factors that determine the optimum conditions used in the industrial production of a selected industrial process such as Sulfuric acid and will analyse the energy transformation occurring in chemical reactions through the use of calorimeters.

Chemistry Pathways
Students can continue to study Chemistry in a variety of University degrees including Science and Engineering, Medicine, Health Science, Applied Science, Physiotherapy and allied fields.
DRAMA UNITS 3 & 4

Rationale
People tell stories, explore ideas, make sense of their worlds and communicate meaning through drama. Drama develops personal and social identity. VCE Drama connects students to the traditions of drama practice and, through the processes of devising and performing drama, allows them to explore, understand and respond to the contexts, narratives and stories that shape their worlds. The study requires students to be creative and critical thinkers. Through work as solo and ensemble performers and engagement with the work of professional drama practitioners, students develop an appreciation of drama as an art form and develop skills of criticism and aesthetic understanding. VCE Drama equips students with knowledge, skills and confidence to communicate as individuals and collaboratively in social and work-related contexts. The study of drama can provide pathways to training and tertiary study in acting, communication and drama criticism.

Learning Focus
These units focus on the creation of non-naturalistic solo and ensemble performances from a variety of stimuli. Non-naturalistic performance styles and associated theatrical conventions are explored in the creation, development and presentation of a solo and ensemble performances. Students use and manipulate dramatic elements, expressive skills and performance styles to enhance performance. They select stagecraft and theatrical conventions as appropriate to the performance. Students also document and evaluate stages involved in the creation, development and presentation of their performances. A professional performance that incorporates non-naturalistic performance style/s and production elements selected from the prescribed VCE Unit 3 Drama Playlist published annually in the VCAA Bulletin will also be analysed.

Unit 3 and 4 Drama has the following assessment tasks:
- Ensemble performance
- Short solo and written report
- Written evaluations
- Written examination
- Solo performance examination

Drama Pathways
The study of drama provides students with pathways to further studies in fields such as acting, direction, playwriting, production design, production management and studies in drama criticism. Students of drama gain considerable experience in performance which can be applied to several professional skills including public speaking, presentation, collaboration and interpersonal communication.
ECONOMICS UNITS 3 & 4

Rationale
Economics is the study of how individuals and societies use resources to satisfy needs. It is central to understanding why individuals and societies behave as they do. Economic decisions are about resource use in producing goods and services and about the distribution of the proceeds of production. To understand the basis for these decisions, and their impact, requires an understanding of basic economic principles and concepts.

Learning Focus
Students will develop an awareness of the links between economics and the influence of political, ethical, environmental and social forces on economic decision making. Students develop an ability to identify, collect and process data from a range of sources. They use the inquiry process to plan economics investigations, analyse data and form conclusions supported by evidence. They also use economic reasoning, including cost-benefit analysis, to solve economic problems, which assist them in understanding the economy, society and environment, and to verify values and attitudes about issues affecting the economy, society and environment.

Outcomes/Assessment
Students studying Economics Units 3 and 4 will be expected to:
Examine the factors that affect the price and quantity traded in individual markets. Students investigate the importance of competition and analyse the degree of market power in different industries and how this affects the efficiency of resource allocation.
Explain how changes in interest rates will affect inflation, the rate of unemployment and the rate of economic growth.
Describe how the federal government alters the composition and magnitudes of its receipts and expenditure to influence directly and indirectly the components of aggregate demand.

Economics Curriculum Pathways
Economist, Marketing Manager, Operations Management, Industrial Relations Officer, Public Relations, International Trade, Teacher, Administration.
**Rationale**
The study of English contributes to the development of literate individuals capable of critical and creative thinking, aesthetic appreciation and creativity. This study also develops students’ ability to create and analyse texts, moving from interpretation to reflection and critical analysis. Through engagement with texts from the contemporary world and from the past, and using texts from Australia and from other cultures, students studying English become confident, articulate and critically aware communicators and further develop a sense of themselves, their world and their place within it. English helps equip students for participation in a democratic society and the global community. This study will build on the learning established through AusVELS English in the key discipline concepts of language, literature and literacy, and the language modes of listening, speaking, reading, viewing and writing.

**Learning Focus**
In Unit 3 students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts. In Unit 4 students compare the presentation of ideas, issues and themes in texts. They create an oral presentation intended to position audiences about an issue currently debated in the media.

**Outcomes/Assessment**
Students studying Units 3 and 4 English will be need to satisfactorily complete:
- Two text response essays
- Two contextual responses
- One oral speech conveying an opinion
- Language analysis essay
- End of year examination

**Pathways**
Students must undertake Unit 3 prior to undertaking Unit 4. Units 1 to 4 are designed to a standard equivalent to the final two years of secondary education. All VCE studies are benchmarked against comparable national and international curriculum.
FURTHER MATHEMATICS UNITS 3 & 4

Rationale
Mathematics is the study of function and pattern in number, logic, space and structure. It provides both a framework for thinking and a means of symbolic communication that is powerful, logical, concise and precise. It also provides a means by which people can understand and manage their environment. Essential mathematical activities include calculating and computing, abstracting, conjecturing, proving, applying, investigating, modelling, and problem posing and solving.

Further Mathematics consists of a compulsory core area of study ‘Data analysis’ and then a selection of three from six modules in the ‘Applications’ area of study. Unit 3 comprises the ‘Data analysis’ area of study which incorporates a statistical application task, and one of the selected modules from the ‘Applications’ area of study. Unit 4 comprises the two other selected modules from the ‘Applications’ area of study. Assumed knowledge and skills for the ‘Data analysis’ area of study are contained in the topics: Univariate data, Bivariate data, Linear graphs and modelling, and Linear relations and equations from General Mathematics Units 1 and 2.

Learning Focus
The appropriate use of technology to support and develop the teaching and learning of mathematics is to be incorporated throughout the units. This will include the use of some of the following technologies for various areas of study or topics: graphics calculators, spreadsheets, graphing packages, statistical analysis systems, dynamic geometry systems, and computer algebra systems. In particular, students are encouraged to use graphics or CAS calculators, computer algebra systems, spreadsheets or statistical software in ‘Data analysis’, dynamic geometry systems in ‘Geometry and trigonometry’ and graphics calculators, graphing packages or computer algebra systems in the remaining areas of study, both in the learning of new material and the application of this material in a variety of different contexts.

Outcomes/Assessment
There are two areas of study:
1. Data analysis – core material
2. Applications – module material:
   Module 2: Geometry and trigonometry
   Module 5: Networks and decision mathematics
   Module 6: Matrices
Student will do 3 Parts of SACs in core material and 2 Parts of SACs in each modules.

Further Maths Pathways
Students can undertake appropriate tertiary studies after completing Further Maths at VCE level.
GEOGRAPHY UNIT 3 AND 4

**Rationale**
VCE Geography enables students to examine natural and human phenomena, how and why they change, their interconnections and the patterns they form across the Earth's surface. In doing so, they develop a better understanding of their own place and its spaces and those in other parts of the world. These spatial perspectives, when integrated with historical, economic, ecological and cultural perspectives, deepen understanding of places, environments and human interactions with these.

Interpretative and analytical skills enable students to interpret information presented in a variety of formats including maps, graphs, diagrams and images.

**Learning Focus**

**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 three major processes that are changing land cover in many regions of the world. Students investigate the distribution and causes of these three processes. At a local scale students investigate land use change using appropriate fieldwork techniques and secondary sources. They investigate the scale of change, the reasons for change and the impacts of change. Students undertake fieldwork and produce a fieldwork report using the structure provided.

**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. Population movements such as voluntary and forced movements over long or short terms add further complexity to population structures and to economic, social, political and environmental conditions.

**Assessments**
- School-assessed Coursework Unit 3: 25 per cent (Field Report, Structured Questions and Data Analysis)
- School-assessed Coursework Unit 4: 25 per cent (Structured Questions and Data Analysis)
- End-of-year examination: 50 per cent

**Pathways**
Rationale
Through the study of VCE Health and Human Development, students investigate health and human development in local, Australian and global communities. The study of Health and Human Development is based on the premise that health and human development needs to be promoted at an individual level, and within group and community settings at national and international levels, to maximize global development potential. This underpins the structure of the four units of Health and Human Development. The study also promotes the understanding that nutrition plays a major role in influencing both health status and individual human development.

Learning Focus
Health and Human Development provides students with an understanding of the health status of Australians by investigating the burden of disease and the health of population groups in Australia. Students use key health measures to compare health in Australia with other developed countries, and analyze how biological, behavioural and social determinants of health contribute to variations in health status. Students examine the development of the NHPAs and their relationship to burden of disease in Australia. Students examine different models of health and health promotion. They investigate the roles and responsibilities of governments in addressing health needs and promoting health. In Unit 4 students explore global health, human development and sustainability and their interdependencies. They identify similarities and differences in the health status between people living in developing countries and Australians, and analyze reasons for the differences. The role of the United Nations Millennium Development Goals is investigated in relation to achieving sustainable improvements in health status and human development. Students explore the role of international organisations including the UN and WHO in achieving sustainable improvements in health and human development. Students consider strategies designed to promote health and sustainable human development globally as well as Australia’s contribution to international health programs through AusAid and contributions to non-government.

Outcomes/Assessment
Students studying Unit 3 and 4 Health and Human Development will be expected to complete the following Assessments (SACs):
- Data Analyses
- Written response
- Tests
- Examinations

Health and Human Development Pathway
Students can elect to study many courses at university and TAFE in Health Sciences.
Rationale
Revolutions are the great disjuncture of modern times and mark deliberate attempts at new directions. They share the common aim of breaking with the past by destroying the regimes and societies that engender them and embarking on a program of political and social transformation. In Unit 3&4 our students are introduced to the events, people, movements and ideas that drive political, economic and social change in our modern world, within the context of the French and Russian Revolutions.

Learning Focus
Students investigate the causes for the French and Russian Revolutions, with a focus on the revolutionary ideas, leaders, movements and events that occurred. They investigate the weakness in the existing regimes and the extent to which these regimes were unable to respond to the changing political, economic and/or social scene. Students examine the development of the new political order and the emerging society, and the challenges faced by the revolutionary governments, for example: political dissent, civil war, economic breakdown, wars of foreign intervention and resistance to revolutionary forces.

Students delve into the debates that exist between historians, analysing historical commentaries, evaluating differing viewpoints and establishing through critical analysis, judgements regarding how successful revolutions and revolutionaries have been in bringing about change.

Outcomes/Assessment
Students studying Units 3 and 4 History Revolutions will be expected to:
Describe and analyse events, people, ideas and movements that caused the French and Russian Revolutions;
Identify and evaluate the challenges faced by emerging regimes and the ways in which attempts were made to create new societies, and the nature of these new societies;
Gather, analyse and evaluate evidence, and synthesise ideas in order to develop coherent arguments on the material covered.

History Curriculum Pathways
Pathways that may be of interest to students of History Revolutions Unit 3 and 4 include the pursuit of studies at tertiary level including the roles of teaching, work in archives, libraries, and museums; professional consultants in public history; journalism, publishing, public relations, advertising, civil service, planning and policy administration; finance and service industry.
LEGAL STUDIES UNITS 3 & 4

Rationale
VCE Legal Studies examines the processes of law-making, dispute resolution and the administration of justice in Australia. Students develop an understanding of the impact of the legal system on the lives of citizens, and the implications of legal decisions and outcomes on Australian society. The study provides students with an appreciation of how individuals can be involved in decision-making within the legal system, encouraging civic engagement and helping them to become more informed and active citizens.

Learning Focus
Students develop an appreciation of the complex nature of law-making by investigating the key features and operation of parliament, and influences on law-making.
Students develop an understanding of the importance of the Constitution in their lives and on society as a whole, and undertake a comparative analysis with another country. They learn of the importance of the role played by the High Court of Australia in interpreting and enforcing the Constitution, and ensuring that parliaments do not act outside their areas of power nor infringe protected rights. Students examine the institutions that adjudicate criminal cases and civil disputes. Students investigate the processes and procedures followed in courtrooms and develop an understanding of the adversary system of trial and the jury system, as well as pre-trial and post-trial procedures that operate in the Victorian legal system. Using the elements of an effective legal system, students consider the extent to which court processes and procedures contribute to the effective operation of the legal system. They also consider reforms that could further improve its effective operation.

Outcomes/Assessment
Students studying Legal Studies Units 3 and 4 will be expected to:
Describe the role and effectiveness of Parliament as a law-making body as well as evaluate the need for change in the law. Students need to analyse ways changes in the law might be influenced, explain the role of the Commonwealth Constitution in defining the law-making powers of the state and Commonwealth parliaments and evaluate the effectiveness of the Constitution in protecting human and democratic rights. Students describe the role of the courts and their relationship with Parliament. Explain the elements of an effective legal system and evaluate the processes and procedures for the resolution of criminal and civil disputes.

Legal Studies Curriculum Pathways
Pathways that may be of interest to students of Legal Studies Unit 3 and 4 include the pursuit of studies at tertiary level including the roles of Solicitor, Barrister, Paralegal, Police officer, Prison staff.
LITERATURE UNITS 3 & 4

Rationale
VCE Literature provides opportunities for students to develop their awareness of other people, places and cultures and explore the way texts represent the complexity of human experience. Students examine the evolving and dialogic nature of texts, the changing contexts in which they were produced and notions of value. They develop an understanding and appreciation of literature, and an ability to reflect critically on the aesthetic and intellectual aspects of texts.
The study of Literature enables students to consider the power and complexity of language, the ways literary features and techniques contribute to meaning and the significance of form and structure. They develop their capacity to read and interpret texts and reflect on their interpretations and those of others, and in turn reflect on their personal experience and the experiences of others, cultivating an awareness that there are multiple readings of texts and that the nature of language and text is dynamic. They are encouraged to be independent, innovative and creative, developing the ability to read deeply and widely and to establish and articulate their views through creative and analytical responses.

Learning Focus
In Unit 3 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.
In Unit 4 students develop critical and analytic responses to texts. They consider the context of their responses to texts as well as the ideas explored in the texts, the style of the language and points of view. They investigate literary criticism informing both the reading and writing of texts. Students develop an informed and sustained interpretation supported by close textual analysis. For the purposes of this unit, literary criticism is characterised by extended, informed and substantiated views on texts and may include reviews, peer-reviewed articles and transcripts of speeches. Specifically, for Unit 4 Outcome 1, the literary criticism selected must reflect different perspectives, assumptions and ideas about the views and values of the text/s studied.

Outcomes/Assessment
Students studying Units 3 and 4 Literature will need to satisfactorily complete:
- Oral presentation on personal context and interpretation
- Short Story
- Film analysis
- Comparative essay
- Screenplay
- Social commentary
- Close analysis

Pathways
Students who satisfactorily complete Units 3 and 4 of Literature have the option of completing further literary studies at University and beyond. As active, critically aware citizens, students can go on to interpret and make effective use of the specialist language of diverse texts, including texts relevant to academic disciplines and to workplace situations.
LITERATURE UNITS 3 & 4

Rationale
LOTE: INDONESIAN UNITS  3 & 4

Rationale
The study of Languages contributes to the overall education of students, most particularly in the area of communication, but also in the areas of cross-cultural understanding, cognitive development, literacy and general knowledge. It provides access to the culture of communities which use the language and promotes understanding of different attitudes and values within the wider Australian community and beyond.

Learning Focus
The detailed study should enable the student to explore and compare aspects of the language and culture of the Indonesian-speaking community through a range of oral and written texts in Indonesian related to the selected sub-topic. This will enable the student to develop knowledge and understanding of, for example, historical issues, aspects of contemporary society or the literary or artistic heritage of the community. The texts which form the basis of this study might include feature films, short films, short stories, songs, newspaper articles, electronic texts, documentaries, music, painting and oral histories. The length of texts selected will vary depending on the type of text, its density and level of complexity. In order for the student to be able to explore their sub-topic in sufficient depth to meet the relevant outcomes, it is suggested that a range of at least three different kinds of text are selected. These might include aural and visual, as well as written texts.

Outcomes/Assessment:
Unit 3
Outcome 1: On completion of this unit the student should be able to express ideas through the production of original texts.
Outcome 2: On completion of this unit the student should be able to analyse and use information from spoken texts.
Outcome 3: On completion of this unit the student should be able to exchange information, opinions and experiences.

Unit 4
Outcome 1: On completion of this unit the student should be able to analyse and use information from written texts.
Outcome 2: On completion of this unit the student should be able to respond critically to spoken and written texts which reflect aspects of the language and culture of Indonesian-speaking communities.

Pathway
Students must undertake Unit 3 prior to undertaking Unit 4. Languages studies in Indonesian at VCE attract bonus points for candidates facilitating higher education entry. The ENTER score is used to determine tertiary access, acknowledges language study. Second language study can be a good predictor of a student’s ability to pursue a demanding post-compulsory program of study. This is because a second language requires sustained effort over time and as a cumulative subject of study, it is both practical and academic at the same time.
LOTE: JAPANESE UNITS 3 & 4

Rationale
The study Languages contributes to the overall education of students, most particularly in the area of communication, but also in the areas of cross-cultural understanding, cognitive development, literacy and general knowledge. It provides access to the culture of communities which use the language and promotes understanding of different attitudes and values within the wider Australian community and beyond.

Learning Focus
The areas of study for Japanese Second Language comprise themes and topics, text types, kinds of writing, vocabulary and grammar. They are common to all four units of the study, and are designed to be drawn upon in an integrated way, as appropriate to the linguistic needs of the student, and the outcomes for the unit. The themes and topics are the vehicle through which the student will demonstrate achievement of the outcomes, in the sense that they form the subject of the activities and tasks the student undertakes. The text types, kinds of writing, vocabulary and grammar are linked, both to each other, and to the themes and topics. Together, as common areas of study, they add a further layer of definition to the knowledge and skills required for successful achievement of the outcomes. The common areas of study provide the opportunity for the student to build upon what is familiar, as well as develop knowledge and skills in new and more challenging areas.

Outcomes/Assessment
Unit 3
Outcome 1: On completion of this unit the student should be able to express ideas through the production of original texts.
Outcome 2: On completion of this unit the student should be able to analyse and use information from spoken texts.
Outcome 3: On completion of this unit the student should be able to exchange information, opinions and experiences.

Unit 4
Outcome 1: On completion of this unit the student should be able to analyse and use information from written texts.
Outcome 2: On completion of this unit the student should be able to respond critically to spoken and written texts which reflect aspects of the language and culture of Japanese-speaking communities.

Pathways
Students must undertake Unit 3 prior to undertaking Unit 4. Languages studies in Japanese at VCE attract bonus points for candidates facilitating higher education entry. The ATAR score is used to determine tertiary access acknowledges language study. Second language study can be a good predictor of a student’s ability to pursue a demanding post-compulsory program of study. This is because a second language requires sustained effort over time and as a cumulative subject of study, it is both practical and academic at the same time.
LOTE: ITALIAN UNITS 3 & 4

Rationale
The study of Languages contributes to the overall education of students, most particularly in the area of communication, but also in the areas of cross-cultural understanding, cognitive development, literacy and general knowledge. It provides access to the culture of communities which use the language and promotes understanding of different attitudes and values within the wider Australian community and beyond.

Learning Focus
The areas of study for Italian comprise themes and topics, text types, kinds of writing, vocabulary and grammar. They are common to all four units of the study, and they are designed to be drawn upon in an integrated way, as appropriate to the linguistic needs of the student, and the outcomes for the unit. The themes and topics are the vehicle through which the student will demonstrate achievement of the outcomes, in the sense that they form the subject of the activities and tasks the student undertakes. The text types, kinds of writing, vocabulary and grammar are linked, both to each other, and to the themes and topics. Together, as common areas of study, they add a further layer of definition to the knowledge and skills required for successful achievement of the outcomes. The common areas of study have been selected to provide the opportunity for the student to build upon what is familiar, as well as develop knowledge and skills in new and more challenging areas.

Outcomes/Assessment

Unit 3
Outcome 1: On completion of this unit the student should be able to express ideas through the production of original texts.
Outcome 2: On completion of this unit the student should be able to analyse and use information from spoken texts.
Outcome 3: On completion of this unit the student should be able to exchange information, opinions and experiences.

Unit 4
Outcome 1: On completion of this unit the student should be able to analyse and use information from written texts.
Outcome 2: On completion of this unit the student should be able to respond critically to spoken and written texts which reflect aspects of the language and culture of Italian-speaking communities.

Pathways
Students must undertake Unit 3 prior to undertaking Unit 4. Italian is designed for students who will, typically, have studied the language for at least 200 hours prior to the commencement of Unit 1. It is possible, however, that some students with less formal experience will also be able to meet the requirements successfully. Units 1 to 4 are designed to be of an appropriate standard for the final years of secondary education. All VCE studies are benchmarked against comparable national and international curriculum.
INFORMATION TECHNOLOGY: IT APPLICATIONS UNITS 3&4

Rationale
VCE Information Technology focuses on the processing of data and the management of information and information systems. The rapid pace of development in information and communications technology (ICT) is having a major influence on many aspects of society. Not only does ICT provide the capacity to change how tasks and activities are undertaken, but it also creates new opportunities in work, education, entertainment, learning.

Learning Focus
The focus of Unit 3 is the World Wide Web and how it supports the information needs of individuals, communities and organisations. Students investigate the design and technical underpinnings of different types of websites that support the varying needs of online communities. Students use web authoring software to create prototype websites for particular online communities, taking into account both technical and non-technical constraints. The Focus of Unit 4 is how ICT is used by organisations to solve ongoing information problems and on the strategies used to protect the integrity and security of data and information. Students study either a relational database management system (RDBMS) or spread sheet software to create solutions to information problems. In addition, students use web authoring or multimedia authoring software to produce onscreen user documentation. When creating solutions to ongoing information problems, students apply all stages of the problem-solving methodology. Students explore how organisations manage the storage, communication and disposal of data and information in order to minimise threats to the integrity and security of data and information, and to optimise efficient information handling.

Outcomes
Students studying Units 3 and 4 Information Technology will be expected to:
• Create a prototype website that meets an online community’s needs
• Design, and develop using a relational database management system
• Solve an ongoing information problem,
• Evaluate the effectiveness of strategies used by organisations to manage information.
• VCAA Examination

Information Technology Applications Pathways
Students studying Information Technology Applications make available pathways via appropriate university selection into Information Technology Security, Networking, System maintenance, Project Management and Computational thinking.
INFORMATION TECHNOLOGY: SOFTWARE DEVELOPMENT UNITS 3 & 4

**Rationale**
VCE Information Technology focuses on the processing of data and the management of information and information systems. The rapid pace of development in information and communications technology (ICT) is having a major influence on many aspects of society. Not only does ICT provide the capacity to change how tasks and activities are undertaken, but it also creates new opportunities in work, education, entertainment and society.

**Learning Focus**
Unit 3 focuses on programming as a strategy for solving problems for specific users in a networked environment. Students develop knowledge and skills in the use of a programming language. The programming language selected will be studied for both Units 3 and 4. When programming in Unit 3, students are expected to have an overview of the problem-solving methodology and a detailed understanding of the stages of analysis, design and development.

Unit 4 focuses on how the information needs of individuals; organisations and society are and can be met through the creation of purpose-designed solutions in a networked environment. Students continue to study the programming language selected in Unit 3. In this unit students are required to engage in the design, development and evaluation stages of the problem-solving methodology.

**Outcomes**
- Analysis of existing system
- Design and develop a prototype solution
- Design and develop a solution for a mobile device
- Recommend and justify solutions for effective and efficient systems in a network
- VCAA Examination

**Software Development Pathways**
Students Studying Information Technology Applications Software Development make available pathways via appropriate university selection into Information Technology Security, Networking, System maintenance, Project Management and Computational thinking.
MATHEMATICAL METHODS CAS UNITS 3 & 4

**Rationale**
The study of Mathematical Methods CAS Units 3 and 4, taken alone or in conjunction with either Specialist Mathematics Units 3 and 4 or Further Mathematics Units 3 and 4, provide an appropriate background for further study in science, humanities, economics or medicine.

**Learning Focus**
Students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, algebraic manipulation, equation solving, graph sketching, differentiation and integration with and without the use of technology, as applicable. Students should be familiar with relevant mental and by hand approaches in simple cases.

The appropriate use of computer algebra system technology (CAS) to support and develop the teaching and learning of mathematics, and in related assessments, is to be incorporated throughout the course.

This will include the use of computer algebra technology to assist in the development of mathematical ideas and concepts, the application of specific techniques and processes to produce required results and its use as a tool for systematic analysis in investigative, problem-solving and modelling work.

Other technologies such as spreadsheets, dynamic geometry systems or statistical analysis systems may also be used as appropriate for various topics from within the areas of study.

**Outcomes/Assessment**
Students studying Units 3 and 4 Mathematical Methods CAS will be expected to do:

SAC 1 (Test) – Functions and relations, Families of functions, Polynomial functions. Outcome 1 & 3.

SAC 2 (Test) – Exponential and logarithmic functions, Differentiation of polynomials, power functions and rational functions. Outcome 1 & 3.

SAC 3 (Application task) – Optimisation (finding maximum volume) using differentiation. Outcome 1-3.


SAC 5 (Analysis task) – Probability. Outcome 1 - 3.

**Mathematical Methods CAS 3/4 Pathways**
Students can undertake further study in science, humanities, economics or medicine at university level.
## MUSIC SOLO PERFORMANCE UNITS 3 & 4

### Rationale
Music is an integral part of all cultures and societies, both contemporary and historical. VCE Music offers students opportunities to engage in the practice of performing, creating and studying music that is representative of diverse genres, styles and cultures. Students can specialise in one or more approaches to the study of music, depending on their VCE program overall and the post-VCE pathways they may be interested in following. Students develop knowledge of stylistic, aesthetic and expressive qualities and characteristics of music and develop their ability to communicate their understanding through music making: performing, composing, arranging and/or improvising; and musicianship: aural perception, analysis and music language.

### Learning Focus
These units prepare students to present convincing performances of group and solo works. In these units students select a program of group and solo works representing a range of styles and diversity of character for performance. They develop instrumental techniques that enable them to interpret the works and expressively shape their performances. They also develop an understanding of performance conventions they can use to enhance their performances. Students develop skills in unprepared performance, aural perception and comprehension, transcription, music theory and analysis.

### Assessments
- Units 3 and 4 School-assessed Coursework: 30 per cent
- External end-of-year performance examination: 50 per cent
- External end-of-year aural and written examination: 20 per cent

### Music Pathways
Music Performance 3 and 4 is often the gateway to study Music at a Tertiary Institution. Alternatively or in conjunction, students have the opportunity to study VETiS Music Industry.
PHYSICAL EDUCATION UNITS 3 & 4

Rationale
VCE Physical Education examines the biological, physiological, social and cultural influences on performance and participation in physical activity. It focuses on the interrelationship between motor learning and psychological, biomechanical, physiological and sociological factors that influence physical performances, and participation in physical activity. The study of physical activity and sedentary behaviour is significant for the understanding of health, wellbeing and performance of people. This study enables the integration of theoretical knowledge with practical application through participation in physical activities. There are opportunities for students to apply theoretical concepts and reflect critically on factors that affect all levels of performance and participation.

Learning Focus
Unit 3 introduces students to an understanding of physical activity and sedentary behaviour from a participatory and physiological perspective. Students learn the National Physical Activity Guidelines. Students study and apply the social-ecological model to identify a range of Australian strategies. Students investigate the contribution of energy systems to performance in physical activity. In particular, they investigate the characteristics of each system and the interplay of the systems during physical activity. Students explore the multi-factorial causes of fatigue and consider different strategies used to delay and manage fatigue and to promote recovery. In Unit 4, students learn that improvements in performance, in particular fitness, depend on the ability of the individual or coach to gain, apply and evaluate knowledge and understanding of training. Students undertake an activity analysis. Using the results of the analysis, they then investigate the required fitness components and participate in a training program designed to improve or maintain selected components. Athletes and coaches aim to continually improve and use nutritional, physiological and psychological strategies to gain advantage over the competition. Students learn to critically evaluate different techniques and practices that can be used to enhance performance, and look at the rationale for the banning or inclusion of various practices from sporting competition.

Outcomes/Assessment
Students studying Units 3 and 4 Physical Education will be expected to: complete six (6) SACS over the year, three (3) for Unit 3 and three (3) for Unit 4. These SACS will vary between case studies, tests, and laboratory sessions.

Physical Education - Pathways
Students may choose to pursue further education in Physical Education studies, Nursing, Paramedics and many other available options. Students may also choose to do this through TAFE and/or university.
**PHYSICS UNITS 3 & 4**

**Rationale**
Physics uses both scientific and mathematical knowledge to further investigate the physical environment that will allow students to develop a further curiosity at a later stage in life. Through student interest and use of technology, Physics allows the next generation to think beyond the classroom to permit a desire to make sense of our world and future endeavours of human interest through science.

**Learning Focus**
In Unit 3 Physics, students develop an understanding of the nature of forces and motion, matter and energy in both one and two dimensions. This extends into the world of circuits through ‘electronics and photonics’ (the influence photons have on modern day circuits). A detailed study closes off the opportunity for students to further discover in the subject, as is the case for Unit 4 Physics. To complement the learning focus of Unit 3, Unit 4 extends into ‘electric power and the mechanical operations associated with electric power’. The final area of study is ‘light and matter’ which compares theories associated with the topic and permit introductory mathematical modelling associated to ‘light and matter’. Students will enrich the following inquiry skills: questioning and predicting; planning and conducting; processing and analysing data and information; evaluating and; communicating.

**Outcomes**
Students studying Unit 3 and 4 Physics will complete the following outcomes:

### Unit 3
- Motion in one and two dimensions
- Electronics and Photonics
- Detailed Study (one of Further electronics; Einstein’s relativity; or Materials & their use in Structures)

### Unit 4
- Electric Power
- Light and Matter
- Detailed Study (one of Sound; Synchrotron; or Photonics)

**Physics Unit 3 and 4 Pathways**
Students can continue to study Physics by electing to undertake further studies at the tertiary level. For further and up to date advice, visit the careers counsellor to determine what level of understanding of Physics may lead to a career path of interest.
Rationale
VCE Food and Technology focuses on the importance of food in our daily lives from both a theoretical and practical point of view. The study enables students to apply their theoretical understanding of the relationship between food and technology as they develop skills in food preparation. VCE Food and Technology challenges students to make links between food, food processing, nutrition, health and well-being. Students are given the opportunity to consider the importance of environmental issues and sustainability practices in food production, as well as the important role of technology in food product development. Students develop knowledge of the physical, chemical, sensory and functional properties of food and are able to apply this knowledge when using food in a practical situation. They develop and apply the knowledge and skills to prepare food safely and hygienically. Students use the design process, critical thinking and problem-solving skills to develop food products to suit specific situations or to meet the needs of individual consumers and their lifestyles.

Learning Focus
Unit 3 Food preparation, processing and food controls In this unit students develop an understanding of food safety in Australia. They investigate the causes of food spoilage and food poisoning and apply safe work practices while preparing food. Students demonstrate understanding of key foods, analyse the functions of the natural components of key foods and apply this information in the preparation of foods. They investigate cooking techniques and justify the use of the techniques they select when preparing key foods. They also preserve food using these techniques. Students devise a design brief from which they develop a detailed design plan. Unit 4 Food focuses on product development and emerging trends. Students develop individual production plans for the proposed four to six food items and implement the design plan they established in Unit 3. In completing this task, students apply safe and hygienic work practices using a range of preparation and production processes, including some which are complex.

Outcomes/Assessment
Students studying Year 12 Food Technology will be expected to complete the following assessment tasks:
- Design brief
- Design plan for development of food product
- Written analytical tasks
- Evaluation tasks

Learning Pathways
Students who complete Year 10 Food Technology can study Food and Technology at VCE Level.
# PRODUCT DESIGN AND TECHNOLOGY: TEXTILES UNITS 3 & 4

## Rationale
Designers play an important part in our daily lives. They determine the form and function of the products we use. They transform ideas into drawings and plans for the creation and manufacture of useful products that fulfil human needs and wants. In recent history the use of resources to create an ever-increasing array of products has given designers an increased responsibility to think sustainably.

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

Please note there is a materials cost for this subject.

## Outcomes/Assessment
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Product Design and Technology students’ level of achievement will be determined by School-assessed Coursework, School-assessed Task and an End-of-year examination.

Students present a folio that documents the Product design process used while working as a designer to meet the needs of a client and/or an end-user, and commence production of the designed product. They safely apply a range of production skills and processes to make the product designed in Unit 3, and manage time and resources effectively and efficiently. On completion of their project students evaluate the outcomes of the design, planning and production activities, explain the product’s design features to the client and/or an end-user and outline its care requirements.

## Textiles Pathways
VCE Product Design and Technology can provide a pathway to a range of related fields such as industrial, product, interior and exhibition design, engineering, and fashion, furniture, jewellery, textile and ceramic design at both professional and vocational levels. Moreover, VCE Product Design and Technology can inform sustainable behaviours and develop technical skills to present multiple solutions to everyday life situations. It contributes to creating confident and unique problem solvers and project managers well equipped to deal with the multi-disciplinary nature of modern workplaces.
**PRODUCT DESIGN AND TECHNOLOGY: WOOD UNITS 3 & 4**

**Rationale**
Designers play an important part in our daily lives. They determine the form and function of the products we use. They transform ideas into drawings and plans for the creation and manufacture of useful products that fulfil human needs and wants. In recent history the use of resources to create an ever-increasing array of products has given designers an increased responsibility to think sustainably. Students develop an understanding of the consequences of product design choices. They develop the necessary skills to critically analyse existing products and to develop their own creative solutions.

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

Please note there is a materials cost for this subject.

**Outcomes/Assessment**
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Product Design and Technology students' level of achievement will be determined by School-assessed Coursework, School-assessed Task and an End-of-year examination. Students present a folio that documents the Product design process used while working as a designer to meet the needs of a client and/or an end-user, and commence production of the designed product. They safely apply a range of production skills and processes to make the product designed in Unit 3, and manage time and resources effectively and efficiently. On completion of their project students evaluate the outcomes of the design, planning and production activities, explain the product's design features to the client and/or an end-user and outline its care requirements.

**Wood Pathways**
VCE Product Design and Technology can provide a pathway to a range of related fields such as industrial, product, interior and exhibition design, engineering, and furniture, at both professional and vocational levels. Moreover, VCE Product Design and Technology can inform sustainable behaviours and develop technical skills to present multiple solutions to everyday life situations. It contributes to creating confident and unique problem solvers and project managers well equipped to deal with the multi-disciplinary nature of modern workplaces.
Rationale
This course explores complex human behaviours and thought processes. It develops empathetic understandings and an understanding of mental health issues in society. Students are given the opportunity to apply psychological principles to everyday situations such as workplace and social relations. Psychology provides students with a sophisticated framework for understanding the complex interactions between biological, behavioural, cognitive and socio-cultural factors that influence thought, emotions and behaviour.

Learning Focus
Unit 3 explores the relationships between consciousness and thoughts, feelings and behaviour by comparing the characteristics of normal waking consciousness with altered states of consciousness (including sleep). The Unit also studies the neural basis of memory and the connectivity between brain areas to explain the complexity of memory, factors that affect memory and its decline over time, and the cause of forgetfulness. Unit 4 studies the neural basis of learning, and examines different types of learning: classical conditioning, operant conditioning, observational learning, one-trial learning, trial and error learning, insight learning and latent learning. Students use a biopsychosocial framework to investigate how biological, psychological and sociocultural factors interact to contribute to the development of an individual's mental functioning and mental health. Students apply a biopsychosocial framework to the study a selected mental disorder.

Outcomes/Assessment
Students studying Unit 3 and 4 Psychology will be expected to Satisfactorily fulfil 4 Learning Outcomes (two for each unit). They will achieve these outcomes through the completion of the following tasks:
- Report of a research investigation (ERA)
- Tests
- Annotated folio of practical activities
- Visual presentation
The students will also sit an examination and the end of Unit 4.

Psychology Pathways
The study of Psychology leads to opportunities in a range of careers that involve working with children, adults, families and communities in a variety of settings. Fields of applied psychology include educational, environmental, forensic, health, sport and organisational psychology. Specialist fields of psychology include counselling and clinical contexts, as well as neuropsychology, social psychology and developmental psychology.
RELIGIOUS EDUCATION: RELIGION & ARTS (School Based Program)

Rationale
The world is the primary context and place of God’s self-disclosure to all of humanity. It is in the lived reality of our daily lives that we are called to experience God as Creator, Jesus as Saviour and the Holy Spirit as Guide. The Catholic school is part of the world and part of the community of the Church and invites all the members of the school community to search for God in the world and to live a life framed by the life and words of Jesus.

Learning Focus
This unique program focuses on the many ways in which music, art and film are used to express aspects of faith. The main focus is on the students’ home tradition Catholicism with reference to major religions of the world. Art always and everywhere has been a medium through which people have sought to express their religious belief. Students will compare and contrast some of the ways in which believers express their principal beliefs, ideas and teachings through creative and expressive art forms. Then, students will identify the emotions of awe, peace, joy and wonder which can be expressed through music. This unit enables students to learn and experience how the use of music can lead to stillness and silence. Students will recognise and express feelings in response to ways in which the religious experience is represented through film. Finally, students will conclude the year with a short course on Christian Meditation. Students will learn about the history and practice of Christian Meditation as a way of giving them a gift of prayer that they can draw on for the rest of their lives.

Outcomes/Assessment
The primary purpose of assessment is to assist in better teaching and learning. Students will have three Formative Assessment Tasks and two Summative Unit Tests at the end of each term and an End of Year Examination. Assessment Task 1 – Visual Art Work, Assessment Task 2 - Creative Musical Response, Assessment Task 3 – Film Comparative Analysis, Assessment Task 4 – Meditation Session.

Religious Education - School Based Program Pathways
They develop the critical thinking skills of students essential for understanding religious and ethical issues. Further study in Theology or Religious Education can be done.
RELIGIOUS EDUCATION: RELIGION & SOCIETY UNITS 3 & 4

Rationale
The beliefs, values and ideas of religious traditions can play an important part in shaping and maintaining culture. Religious beliefs about the nature of existence and the purpose of human life provide a frame of reference for understanding the world and for guiding daily personal and communal action. It aims to develop understanding and respect for the perceptions of the participants in religious traditions. It values and promotes open inquiry, without bias towards any one tradition.

Learning Focus
During Semester 1, students begin by studying the religious beliefs developed by one or more than one religious tradition in response to the big questions of life. They explore the ways in which these religious beliefs create meaning for religious traditions and their members. The religious beliefs of any religion arise from the beliefs held about ultimate reality, and these in turn inform particular beliefs about human existence; about its meaning, purpose and destiny.

During Semester 2, students explore challenge and response in historical and contemporary contexts. Students investigate historical challenges to religious traditions arising internally and externally. They explore the challenge to religious traditions in contemporary pluralistic society for action on behalf of social justice and for assessment of new problems arising from social and technological change.

Outcomes/Assessment
During Semester 1, students will cover three areas of study: Area Study One – Meaning in religious traditions, Area Study Two – Maintaining continuity of religious beliefs, Area Study Three – Significant life experience and religious belief.
During Semester 2, students will cover two areas of study: Area Study One – Historical challenges to religious traditions, Area Study Two – Contemporary challenges and their impact.
End of year Examination.

Religion & Society Units 3 & 4 Pathways
Students could study the following: Sociology; Social Work; Counselling; Psychology; Theology; Education.
A high study score in this subject will contribute to an ATAR score which could give you entry into a wide variety of Humanities and Social Sciences subjects.
RELIGIOUS EDUCATION: TEXT & TRADITIONS UNITS 3 & 4

Rationale
Text and Traditions equips students to come to a deeper understanding of the relationship between religious traditions and the written texts which grow from and shape the traditions. There is much to be learned about religious traditions if they are examined in relation to the texts upon which they are founded. These texts become a touchstone to the tradition as the tradition develops and responds to changing circumstances.

Learning Focus
During Semester 1, students develop an understanding of how the text is a response to particular contemporary and historical religious and social needs and events. They explore the formation of the text itself, the intended audience of that text and the message or teaching found within the text. As part of the understanding of the message or teaching of a text, the students also become familiar with the nature of exegetical methods being used by scholars today in the religious tradition of the particular text.

During Semester 2, students continue to apply, in greater depth, the exegetical method to the passages for special study begun in Semester 1. Some texts are regarded as essential for the continuation of a tradition because they function as a means of communicating teachings or understandings about the relationship between the human and the transcendent. These understandings are often expressed through religious ideas, beliefs or social themes in the particular texts.

Outcomes/Assessment
During Semester 1, students will have three areas of study: Area Study One – The background of the tradition, Area Study Two – Historical and literary background to the set text, Area Study Three – Interpreting texts – Exegesis (Part 1)
During Semester 2, students will have two areas of study: Area Study One – Interpreting texts – Exegesis (Part 2), Area Study Two – Religious ideas, beliefs and social themes.
End of year examination.

Text & Traditions Units 3 & 4 Pathways
Students could study the following: History; Theology; Education; Philosophy.
A high study score in this subject will contribute to an ATAR score which could give you entry into a wide variety of Humanities and Social Sciences subjects.
SPECIALIST MATHEMATICS UNITS 3 & 4

Rationale
The study of Specialist Mathematics Units 3 and 4 is intended for those with strong interests in mathematics and those who wish to undertake further study in mathematics and related disciplines. Specialist Mathematics Units 3 and 4 are normally taken in conjunction with Mathematical Methods (CAS) Units 3 and 4, and the areas of study extend and develop material from Mathematical Methods (CAS) Units 3 and 4.

Learning Focus
Students are expected to be able to apply techniques, routines and processes, involving rational, real and complex arithmetic, algebraic manipulation, diagrams and geometric constructions, solving equations, graph sketching, differentiation and integration related to the areas of study, as applicable, both with and without the use of technology. The appropriate use of technology to support and develop the teaching and learning of mathematics is to be incorporated throughout the units. This will include the use of some of the following technologies for various areas of study or topics: graphics calculators, spreadsheets, graphing packages, dynamic geometry systems and computer algebra systems. In particular, students are encouraged to use graphics calculators and other technologies both in the learning of new material and the application of this material in a variety of different contexts.

Outcomes/Assessment
Students studying Units 3 and 4 Specialist Mathematics will be expected to do:
SAC 1 (Analysis task) - Complex numbers, Vectors and Co-ordinate geometry.
SAC 2 (Analysis task) – Circular functions, Differentiation and Rational functions, Antidifferentiation and Applications of integration.
SAC 3 (Application task) – Differential equations
SAC 4 (Test) – Multiple-choice questions on topics covered in SAC 1 – 3
SAC 5 (Test) – Short and Extended- answer questions on Kinematics, Vector functions and Dynamics.

Specialist Mathematics Pathways
Students can continue to study mathematics and related disciplines at university level.
STUDIO ART UNITS 3 & 4

Rationale
VCE Studio Arts encourages and supports students to recognise their individual potential as art makers and presents a guided process to assist their understanding and development of art making. The study establishes effective art practices through the application of an individual design process to assist the student’s production of a folio of artworks. The theoretical components of this study are an important basis for studio practice as it offers students a model for inquiry that can support their art making practices.

Learning Focus
Unit 3 Studio production and professional art practices
In Unit 3 the student uses an exploration proposal to define an area for the development of a visual Design process that is based on their individual concepts. The exploration proposal underpins the student’s working process and is used as a reference for the development and reflection of the design process. This enables the student to establish an understanding about how to generate a range of potential directions for the production of possible future artworks.
Unit 4 Studio production and art industry contexts
In Unit 4 students develop their finished artworks based on selected directions. Students evaluate the use of materials, techniques and aesthetics. This unit also investigates aspects of artists’ involvement in the art industry, focusing on a variety of exhibition spaces and the methods and considerations involved in the preparation, presentation and conservation of artworks. Students examine a range of environments for the presentation of artworks exhibited in contemporary settings. Students are expected to visit at least two different exhibition spaces in their current year of study.

Assessments
• A folio including design exploration, focus statements and finished artworks.
• Written Outcome theory tasks.
• End of Year Examination.

Studio Art Pathways
Employability skills gained from this study include: communication, planning, organising and teamwork skills. As well as problem solving, self-management and initiative skills. This study can also lead to a range of tertiary and vocational studies, such as those associated with multimedia, fine art, graphic and fashion design, the music industry, film and television, theatre and advertising.
VISUAL COMMUNICATION AND DESIGN UNITS 3 & 4

Rationale
The Visual Communication Design study examines the way visual language can be used to convey ideas, information and messages in the fields of communication, environmental and industrial design. Students employ a design process to generate and develop visual communications. The design process provides a structure to organise design thinking and is shaped by considerations of aesthetics and functionality, as well as social, environmental and economic factors. Students develop the skills to manipulate and organise design elements, design principles, selected media, materials and production methods when creating visual communications. Students have the opportunity to investigate the work and practices of Australian and international designers from a variety of social, cultural, historical and contemporary contexts.

Learning Focus
Students create formal design briefs that allow them to explore the materials, methods, media and direction they are most interested in pursuing. In Unit 3 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. Having completed their brief and generated ideas in Unit 3, students continue the design process in Unit 4 by developing and refining concepts for each need stated in the brief. They utilise a range of digital and manual two- and three-dimensional methods, media and materials. They investigate how the application of design elements and design principles creates different communication messages with their target audience.

Assessments
- Analysis in practice - SAC
- Professional Practice - SAC
- The Design Brief, Generating Ideas and Final Presentations Folio - SAT
- The Pitch - SAC
- Written Examination.

Visual Communication and Design Pathways
At the conclusion of this course, the students are able to pursue a career in Design by applying to study at a tertiary institute or university. There are many different fields of design and many courses available. The folio work from these units can provide important