# VCE SUBJECTS OFFERED IN 2016 BY CURRICULUM AREA

| | |
|---|---|
| ARTS | Theatre Studies<br>Media<br>Studio Arts<br>Visual Communication Design |
| ENGLISH | English<br>Literature<br>Indonesian (LOTE) |
| HAPE | Health and Human Development<br>Physical Education<br>Outdoor and Environmental Studies |
| HUMANITIES | Business Management<br>Legal Studies<br>History<br>Politics |
| MATHEMATICS | General Mathematics<br>Further Mathematics<br>Mathematical Methods (CAS) |
| SCIENCE | Biology<br>Chemistry<br>Physics<br>Psychology<br>Extended Investigation -TBC (Unit 3/4 only) |
| TECHNOLOGY | Product Design & Technology<br>Food and Technology<br>Information Technology |

# THEATRE STUDIES
## (THE ARTS)

**Units 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **Pre-modern Theatre**<br>This unit focuses on the application of acting and other stagecraft in relation to theatrical styles of the pre-modern era. Students work with playscripts from the pre-modern era of theatre, focusing on works created up to 1920 in both their written form and in performance. They also study theatrical and performance analysis and apply these skills to the analysis of a play in performance. |

| | |
|---|---|
| **UNIT 2** | **Modern theatre**<br>In this unit students study theatrical styles and stagecraft through working with playscripts in both their written form and in performance with an emphasis on the application of stagecraft. Students work with playscripts from the modern era, focusing on works from the 1920s to the present. They study theatrical analysis and production evaluation and apply these skills to the analysis of a play in performance. |

**Units 3 & 4 must be undertaken in sequence**

| | |
|---|---|
| **UNIT 3** | **Playscript interpretation**<br>In this unit students develop an interpretation of a playscript through the stages of the theatrical production process: planning, development and presentation. Students specialise in two areas of stagecraft, working collaboratively in order to realise the production of a playscript. They use knowledge they develop from this experience to analyse the ways stagecraft can be used to interpret previously unseen playscript excerpts. Students also attend a performance selected from the prescribed VCE Theatre Studies Unit 3 Playlist published annually in the VCAA Bulletin VCE, VCAL and VET, and analyse and evaluate the interpretation of the playscript in the performance. |
| **UNIT 4** | **Performance Interpretation**<br>In this unit students study a scene and associated monologue from the Theatre Studies Stagecraft Examination Specifications published annually by the Victorian Curriculum and Assessment Authority, and develop a theatrical treatment that includes the creation of a character by an actor, stagecraft possibilities, and appropriate research. Students interpret a monologue from within a specified scene using selected areas of stagecraft to realise their interpretation. Students' work for Outcomes 1 and 2 is supported through analysis of a performance they attend selected from the prescribed VCE Theatre Studies Unit 4 Playlist published annually in the VCAA Bulletin VCE, VCAL and VET. |

# MEDIA
## (THE ARTS)

**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **Representation and technologies of representation**<br>Students develop an understanding of the relationship between the media, technology and the representations present in media forms. Students develop practical and analytical skills, including an understanding of the contribution of codes and conventions to the creation of media products and the role audiences play in constructing meaning from media representations. Students analyse the creative and cultural impact of new media technologies. |

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

**Unit 3 & 4 must be undertaken as a sequence**

| | |
|---|---|
| **UNIT 3** | **Narrative media and Media Production Design**<br>Students develop an understanding fictional film and learn to recognise the role and significance of narrative organisation. Students examine how production and story elements work together to structure meaning in narratives to engage audiences. Students also develop practical skills through undertaking exercises related to aspects of the design and production process. They complete a media production design plan for a specific media form and audience. They present the relevant specifications as a written planning document, with visual representations appropriate to the media form in which the student chooses to work. |
| **UNIT 4** | **Media Processes, Influences and Society's Values**<br>Students further develop practical skills in the production of media products to realise the production design plan completed during Unit 3. Organisational and creative skills are refined and applied throughout each stage of the production process. Students analyse the relationship between media texts, social values and discourses in the media. The nature and extent of media influence, the relationship between the media, media audiences and media regulation are also critically analysed in this unit. |

# STUDIO ARTS
## (THE ARTS)

**Units 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **Artistic Inspiration and Techniques**<br>Students use sources of inspiration and ideas as the bases for artworks and the exploration of a wide range of materials and techniques as tools for translating ideas, observations and experiences into visual form. The application of materials and techniques and interpretation of sources of inspiration by artists from different times and locations are also examined. |

| | |
|---|---|
| **UNIT 2** | **Design Exploration and Concepts**<br>The focus of this unit is to establish and use an effective design methodology for the production of design explorations and artworks. Students also develop skills in the analysis of artworks to understand how aesthetic qualities are created, ideas communicated and identifiable styles developed. |

**Units 3 & 4 must be undertaken in sequence**

| | |
|---|---|
| **UNIT 3** | **Studio Production & Professional Art Practices**<br>Students implement the design process that leads to the production of a range of potential solutions. A work brief is initially prepared to set out the framework for the design process. Students also examine professional art practices in relation to particular art form(s) and the development of distinctive styles in artworks. |
| **UNIT 4** | **Studio Production and Art Industry Contexts**<br>Students produce a cohesive folio of finished art works developed from potential solutions generated in Unit 3. Visual and written documentation explaining how the potential solutions will be used to produce the folio of artworks is also prepared. Students also examine the presentation of artworks and current art industry issues, with reference to the exhibition, promotion and critique of art works. |

# VISUAL COMMUNICATION DESIGN
## (THE ARTS)

### Unit 1 & 2 can be undertaken separately

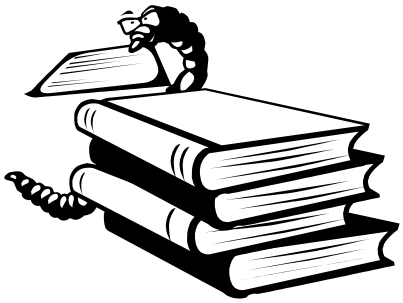
| | |
|---|---|
| **UNIT 1** | **Introduction to Visual Communication Design**<br>Area of Study 1: Drawing as a means of communication<br>Area of Study 2: Design elements and design principles<br>Area of Study 3: Visual communication design in context<br><br>Students will practice observational drawing exploring a range of materials and techniques. Students also investigate how existing visual communications are influenced by historical, social and cultural factors. |

| | |
|---|---|
| **UNIT 2** | **Applications of Visual Communication Design**<br>Area of Study 1: Technical drawing in context<br>Area of Study 2: Type and imagery<br>Area of Study 3: Applying the design process<br><br>Students develop practical skills through two and three-dimensional drawing. Typography is explored through a design process that responds to a given brief. |

### Unit 3 & 4 must be undertaken as a sequence

| | |
|---|---|
| **UNIT 3** | **Design Thinking and Practice**<br>Area of Study 1: Analysis and practice in context<br>Area of Study 2: Design industry practice<br>Area of Study 3: Developing a brief and generating ideas<br><br>Students research, investigate and analyse visual communications. Students also develop a design brief that defines the need or needs of a client where two distinct final presentations will be produced in Unit 4. |
| **UNIT 4** | **Design Development and Presentation**<br>Area of Study 1: Development of design concepts<br>Area of Study 2: Final presentations<br>Area of Study 3: Evaluation and explanation<br><br>Students undertake two separate design processes for two distinct concepts that will culminate in two presentations. Students will then be required to reflect, evaluate and pitch their idea and presentations to an audience. |

# ENGLISH
## (ENGLISH)



**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | The focus of this unit is on the reading of a range of texts, particularly narrative and persuasive texts, in order to comprehend, appreciate and analyse the ways in which texts are constructed and interpreted. The way language is used to persuade the reader and language techniques, are closely examined. Students aim to develop competence and confidence in creating written, oral and multimodal responses to texts. |

| | |
|---|---|
| **UNIT 2** | The focus of this unit is on reading and responding to an expanded range of text types and genres in order to analyse their meaning and construction. The way language is used to persuade the reader and language techniques are closely examined. Students aim to develop further their competence and confidence in creating written, oral and multimodal responses to texts. |

**Unit 3 & 4 must be undertaken as a sequence**

| | |
|---|---|
| **UNIT 3** | The focus of this unit is on reading and responding both orally and in writing to a range of text types. Students analyse how writers create meaning and explore different ways in which texts can be interpreted. They create written texts by exploring ideas suggested by their reading within the chosen context. The students explain and justify choices they have made as authors. Media texts are analysed and responded to in issues study. |
| **UNIT 4** | The focus of this unit is on reading and responding in writing to a range of texts in order to analyse their construction and provide an interpretation of the text. Students create written or multimodal texts suggested by their reading within the chosen context. Students also explain creative choices they have made as authors in relation to form, purpose, language, audience and context. |

# LITERATURE
## (ENGLISH)

**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | This unit focuses on the ways literary texts represent human experience and the reading practices students develop to deepen their understanding of a text. Students respond to a range of texts personally, critically and creatively. This variety of approaches to reading invites questions about the ideas and concerns of the text. While the emphasis is on students' close engagement with language to explore texts, students also deepen their understanding with knowledge of the conventions associated with different forms of text, for example poetry, prose, drama and/or non-print text. |

| | |
|---|---|
| **UNIT 2** | The focus of this unit is on students' critical and creative responses to texts. Students deepen their understanding of their responses to aspects of texts such as the style of narrative, the characters, the language and structure of the text. Students extend their exploration of the ideas and concerns of the text. They explore how cultural influences shape and form a text. Students make comparisons between several texts and identify some of the relationships that exist through features such as the language, characterisation and ideas. |

**Unit 3 & 4 must be undertaken as a sequence**

| | |
|---|---|
| **UNIT 3** | This unit focuses on the ways writers construct their work and how meaning is created for and by the reader. Students consider how the form of text (such as poetry, prose, drama, non-print or combinations of these) affect meaning and generate different expectations in readers. From the text, students examine the way views and values are shaped by the social, historical and cultural contexts of literary works. |
| **UNIT 4** | This unit focuses on students' creative and critical responses to texts. Students consider context and in their own creative responses consider and justify their own choice of language style, themes and authorial voice.<br>Students develop an interpretation of a text and learn to synthesise the insights gained by their engagement with various aspects of a text into a cogent, substantiated response. |

# INDONESIAN
## (LOTE)

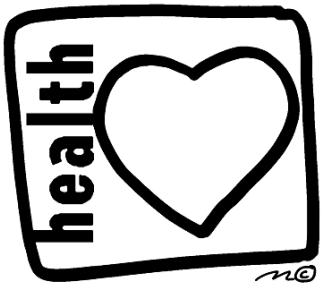

The study of a language other than English contributes to the overall education of students, most particularly in the area of communication, but also in the areas of cross-cultural understanding, intercultural learning, cognitive development, literacy and general knowledge. It provides access to the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

The ability to communicate in another language, in conjunction with other skills, may provide opportunities for employment in the fields of interpreting, social services, ethnic affairs, the tourism and hospitality industries, international relations, the arts, commerce, technology, science, education etc.

| | |
|---|---|
| **UNIT 1** | The three outcomes for Unit 1 are:<br>**Outcome 1**<br>On completion of this unit the student should be able to establish and maintain a spoken or written exchange related to personal areas of experience.<br>**Outcome 2**<br>On completion of this unit the student should be able to listen to, read and obtain information from spoken and written texts.<br>**Outcome 3**<br>On completion of this unit the student should be able to produce a personal response to a text focusing on real or imaginary experience. |

| | |
|---|---|
| **UNIT 2** | The three outcomes for Unit 2 are:<br>**Outcome 1**<br>On completion of this unit the student should be able to participate in a spoken or written exchange related to making arrangements and completing transactions.<br>**Outcome 2**<br>On completion of this unit the student should be able to listen to, read, and extract and use information and ideas from spoken and written texts.<br>**Outcome 3**<br>On completion of this unit the student should be able to give expression to real or imaginary experience in spoken or written form. |

# HEALTH & HUMAN DEVELOPMENT
## (HEALTH AND PHYSICAL EDUCATION)




**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **The Health and Development of Australia's Youth**<br>In this unit, students describe the dimensions of, and the interrelationships within and between, health and individual human development. They describe and explain the factors that impact on the health and individual human development of Australia's youth. Students outline health issues relevant to Australia's youth and, in relation to a specific health issue, analyze strategies or programs that have an impact on youth health and development. |

| | |
|---|---|
| **UNIT 2** | **Individual Human Development and Health Issues**<br>In this unit, students describe and explain the factors that affect the health and individual human development for the lifespan of prenatal, childhood and adulthood. They analyse a number of health issues in detail and investigate strategies and programs that affect the health and development of mothers and babies, children and adults. |

**Unit 3 & 4 must be undertaken as a sequence**

| | |
|---|---|
| **UNIT 3** | **Australia's Health**<br>Students compare the health status of Australia's population with other developed countries, explain variations in health status of population groups in Australia and discuss the role of the National Health Priority Areas in improving Australia's health status. They discuss and analyse approaches to health and health promotion, and describe Australia's health system and the different roles of government and non-government organisations in promoting health. |
| **UNIT 4** | **Global Health and Development**<br>Students analyse factors contributing to variations in health status between Australia and developing countries, evaluate progress towards the United Nations' Millennium Development Goals and describe the interrelationships between health, human development and sustainability. Students describe and evaluate programs implemented by international and Australian government and non-government organisations in promoting health, human development and sustainability. |

# PHYSICAL EDUCATION
## (HEALTH AND PHYSICAL EDUCATION)

**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **Bodies in Motion**<br>Students explore how the body systems work together to produce movement and explore how correct application of biomechanical principles can lead to improved performance. They are introduced to the basic characteristics of aerobic and anaerobic pathways and how they are utilised to provide the muscles with the energy required for movement. Practical activities are used to support and apply content. One detailed study is explored in greater depth; Tech. advancements from a biomechanical perspective OR Injury prevention and rehabilitation. |

| | |
|---|---|
| **UNIT 2** | **Sports Coaching and Physically Active Lifestyles**<br>Students explore a range of coaching practices and their contribution to effective coaching and improved performance of an athlete. They apply this knowledge to practice sessions. Students are introduced to various levels of physical activity, how these vary across the lifespan and the role this plays in the health and wellbeing of the population. Students explore a range of factors that influence participation in regular physical activity, and collect data to identify perceived barriers and the ways in which these barriers can be overcome. Students select one detailed study to explore in greater depth: Decision making in sport OR Promoting active living. |

**Unit 3 & 4 must be undertaken as a sequence**

| | |
|---|---|
| **UNIT 3** | **Physical Activity Participation and Physiological Performance**<br>Students apply various methods to assess physical activity and sedentary levels, and analyse the data in relation to adherence to the National Physical Activity Guidelines. Students analyse a range of Australian strategies that are effective in promoting participation in some form of regular activity. Students investigate the contribution of energy systems and interplay of each in physical activity. Students explore the multi-factorial causes of fatigue and consider different strategies used to delay and manage fatigue and to promote recovery. |
| **UNIT 4** | **Enhancing Performance**<br>Students undertake an activity analysis then use results to investigate the required fitness components and participate in a training program designed to improve or maintain these. 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. |

# OUTDOOR AND ENVIRONMENTAL STUDIES
## (HEALTH AND PHYSICAL EDUCATION)

**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **Exploring Outdoor Experiences**<br>This unit examines some of the ways in which humans understand and relate to nature through experiences of outdoor environments. The focus in on individuals and their personal responses to and experiences of outdoor environments.<br>Students develop a clear understanding of the range of motivations for interacting with outdoor environments and the factors that affect an individual's access to outdoor experiences and relationships with outdoor environments.<br>Through outdoor experiences, students develop practical skills and knowledge to help them live sustainably in outdoor environments. |
| **UNIT 2** | **Discovering Outdoor Environments**<br>This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the human impact on outdoor environments.<br>In this unit students study nature's impact on humans, as well as the ecological, social and economic implications of human impact on outdoor environments. Students develop the practical skills required to minimise human impact on outdoor environments. |

**Unit 3 & 4 must be undertaken as a sequence**

| | |
|---|---|
| **UNIT 3** | **Relationships with Outdoor Environments**<br>The focus of this unit is the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. Students consider a number of factors that influence contemporary relationships with outdoor environments.<br>Students are involved in one or more experiences in outdoor environments, including in areas where there is evidence of human interaction. |
| **UNIT 4** | **Sustainable Outdoor Relationships**<br>In this unit students explore the sustainable use and management of outdoor environments. 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.<br>Students engage in one or more related experiences in outdoor environments. They learn and apply the practical skills and knowledge required to sustain healthy outdoor environments, and evaluate the strategies and actions they employ. |

# BUSINESS MANAGEMENT
## (HUMANITIES)

**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **Small Business Management**<br>Small rather than large businesses make up the large majority of all businesses in the Australian economy. The small business sector provides a wide variety of goods and services for both consumers and industries, such as manufacturing, construction and retail. This, combined with employment opportunities, makes the small business sector a vital component in the success, growth and stability of Australia. This unit provides an opportunity for students to explore the operations of a small business and its likelihood of success. |

| | |
|---|---|
| **UNIT 2** | **Communication and Management**<br>This unit focuses on the importance of effective communication in achieving business objectives. Students investigate communication both internal and external to the business. The vital functions of marketing and public relations are considered, with students developing an understanding of the important role these functions play in the ultimate success of a business. |

**Unit 3 & 4 must be undertaken as a sequence**

| | |
|---|---|
| **UNIT 3** | **Corporate Management**<br>In this unit students investigate how large-scale organisations operate. Students examine the environment (both internal and external) in which large-scale organisations conduct their business, and then focus on aspects of individual business' internal environment and how the operations of the business are managed. Students develop an understanding of the complexity and challenge of managing large-scale organisations and have the opportunity to compare theoretical perspectives with practical applications. |
| **UNIT 4** | **Managing People and Change**<br>This unit continues the examination of corporate management. It commences with a focus on the human resource management function. Students learn about the key aspects of this function and strategies used to most effectively manage human resources. The unit concludes with analysis of the management of change. Students learn about key change management processes and strategies and are provided with the opportunity to apply these to a contemporary issue of significance. |

# LEGAL STUDIES
## (HUMANITIES)

**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **Criminal Law in Action**<br>Students examine the need for laws in society. They investigate the key features of criminal law, how it is enforced and adjudicated and possible outcomes and impacts of crime. Students consider the role of parliament and subordinate authorities in law-making, law enforcement and adjudication in Victoria.<br>Students investigate the processes and procedures followed by courts in hearing and resolving criminal cases. |

| | |
|---|---|
| **UNIT 2** | **Issues in Civil Law**<br>Students examine the rights that are protected by civil law, as well as obligations that laws impose. They investigate types of civil laws and related cases and issues and develop an appreciation of the role of civil law in society. The unit also focuses on the resolution of civil disputes through judicial determination and alternative methods in courts, tribunals and independent bodies. |

**Unit 3 & 4 must be undertaken as a sequence**

| | |
|---|---|
| **UNIT 3** | **Law Making**<br>This unit examines the institutions that determine our laws, and their law-making powers and processes and their effectiveness for the law to keep up to date with changes in society. The relationship between courts and parliaments is explored.<br>Students investigate the key features and operation of parliament, and its influences on law-making, with a focus on the role of the individual.<br>The role played by the Commonwealth Constitution and its importance as a whole is considered while being compared with another country. |
| **UNIT 4** | **Resolution and Justice**<br>Students examine the institutions that adjudicate criminal cases and civil disputes. They investigate methods of dispute resolution that can be used as an alternative to civil litigation. Students 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. They consider reforms or changes that could further improve its effective operation. |

# HISTORY
## (HUMANITIES)

**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **Twentieth Century 1918-1939**<br>The period after World War One was characterised by significant social and cultural change in the contrasting decades of the 1920s and 1930s. New fascist governments used the military, education and propaganda to impose controls on the way people lived, to exclude particular groups of people and to silence criticism. In Germany, the persecution of the Jewish people became intensified. In the USSR, millions of people were forced to work in state-owned factories and farms and had limited personal freedom. Japan became increasingly militarised and anti-western. In the USA, the consumerism and material progress of the 1920s was tempered by the Great Crash of 1929. Writers, artists, musicians, choreographers and filmmakers reflected, promoted or resisted political, economic and social changes. |
| **UNIT 2** | **Twentieth Century 1945-2000**<br>The establishment of the United Nations in 1945 was intended to take an internationalist approach to avoiding warfare, resolving political tensions and addressing threats to human life and safety. The Universal Declaration of Human Rights adopted in 1948 was the first global expression of human rights.<br>Despite internationalist moves, the second half of the twentieth century was dominated by the competing ideologies of democracy and communism, setting the backdrop for the Cold War. |

**Unit 3 & 4 must be undertaken as a sequence**

(Unit 3) - The Russian Revolution (1905-1924)
(Unit 4) -The Chinese Revolution (1898-1976)

| | |
|---|---|
| **UNITS 3 & 4** | Area of Study 1: **Causes of revolution**<br>In this area of study students analyse the long-term causes and short-term triggers of revolution. They evaluate how revolutionary outbreaks are caused by the interplay of significant events, ideas, individuals and popular movements and assess how these were directly or indirectly influenced by the social, political, economic and cultural conditions<br>Area of Study 2: **Consequences of revolution**<br>In this area of study students analyse the consequences of the revolution and evaluate the extent to which it brought change to society. The success of the revolution was not inevitable; therefore, students analyse the significant challenges that confronted the new regime after the initial outbreak of revolution. Furthermore, they evaluate the success of the new regime's responses to these challenges and the extent to which the consequences of revolution resulted in dramatic and wide reaching social, political, economic and cultural change, progress or decline. |

# GLOBAL POLITICS
## (HUMANITIES)

**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **The National Citizen**<br>In this unit students are introduced to the study of politics as the exercise of power by individuals, groups and nation-states. Students consider key concepts related to power and influence, types of power, political ideology and values, political involvement and active citizenship. The nature of and philosophical ideas behind democracy are studied, as well as the operation and nature of contemporary Australian representative democracy. Students examine the reasons why people seek political power, the characteristics of successful political activists and leaders, and the political ideas that motivate them. Students also examine the role and influence of social and political movements as methods of organising political ideas and action. |

| | |
|---|---|
| **UNIT 2** | **The Global Citizen**<br>This unit focuses on the contemporary international community. Students examine their place within this community through considering the debate over the existence of the 'global citizen'. In Area of Study 1 they explore the myriad ways their lives have been affected by the increased interconnectedness– the global threads – of the world through the process of globalisation. In Area of Study 2, students consider the extent to which the notion of an international community exists, and investigate its ability to manage areas of global cooperation and respond to issues of global conflict and instability. |

**Unit 3 & 4 must be undertaken as a sequence.**

| | |
|---|---|
| **UNIT 3** | **Global Actors**<br>In this unit students investigate the key global actors in twenty-first century global politics. They use contemporary 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 interest and power as they relate to the state, and the way in which one Asia-Pacific state uses power within the region to achieve its objectives. For the purposes of this study, the term 'non-state actors' covers a range of global actors: altruistic non-governments organisations (NGOs), for example Amnesty International and Greenpeace; organised religions; terrorist movements and organised crime syndicates. |
| **UNIT 4** | **Global Challengers**<br>In this unit students investigate key global challenges facing the international community in the twenty-first century. They examine and analyse the debates surrounding two ethical issues, which are underpinned by the contested notion of global citizenship. 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 solving them. |

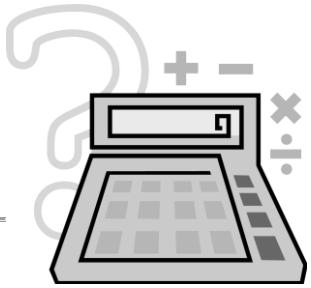
# GENERAL & FURTHER MATHEMATICS
## (MATHEMATICS)

**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1 & 2 - GENERAL MATHEMATICS** | Mathematics is the study of function and pattern in number, logic, space and structure. Essential mathematical activities include calculating and computing, abstracting, conjecturing, proving, applying, investigating, modeling, and problem posing and solving.<br>General Mathematics Units 1 and 2 may be taken alone or in conjunction with Mathematical Methods (CAS) Units 1 and 2. They contain assumed knowledge and skills for related material in Further Mathematics Units 3 and 4. They are strongly recommended, in addition to Mathematical Methods (CAS) Units 1 and 2, as preparation for Specialist Mathematics Units 3 and 4. The areas of study for Unit 1 and Unit 2 of General Mathematics are 'Algebra and structure', 'Arithmetic and number', 'Discrete mathematics', 'Geometry, measurement and trigonometry', 'Graphs of Linear and non-linear relations' and 'Statistics'.<br>The appropriate use of technology is incorporated throughout the course. This will include the use of CAS calculators. |

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

# MATHEMATICAL METHODS
## (MATHEMATICS)



There are no prerequisites for entry to Mathematical Methods (CAS) Units 1 and 2. However, students attempting Mathematical Methods (CAS) are expected to have a strong background in number, algebra, function, and probability.

**It is not recommended that Unit 2 be undertaken unless Unit 1 is completed.**

| | |
|---|---|
| **UNIT 1** | The focus of Unit 1 is the study of simple algebraic functions, and the areas of study are 'Functions and graphs', 'Algebra', 'Calculus' and 'Probability and statistics'. At the end of Unit 1, students are expected to have covered the content outlined in each area of study, with the exception of 'Algebra' which extends across Units 1 and 2. |

| | |
|---|---|
| **UNIT 2** | In Unit 2 students focus on the study of simple transcendental functions and the calculus of simple algebraic functions. The areas of study are 'Functions and graphs', 'Algebra', 'Calculus', and 'Probability and statistics'. In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs, differentiation and anti-differentiation with and without the use of technology |

**Unit 3 & 4 must be undertaken as a sequence**

| | |
|---|---|
| **UNIT 3<br>UNIT 4** | Units 3 and 4 consist of the areas of study 'Functions and graphs', 'Calculus', 'Algebra' and 'Probability and Statistics'. The focus of unit 3 is on various functions and graphs with their associated Algebra. Applications of derivatives and differentiation, and identifying and analysing key features of functions and their graphs are central activities undertaken.<br><br>Unit 4 focuses on Calculus and its application to Probability and statistics. The content from the 'Calculus' area of study includes the treatment of anti-differentiation, integration, the relation between integration and the area of regions specified by lines or curves described by the rules of functions, and simple applications of this content. |

# BIOLOGY
## (SCIENCE)

**Unit 1 & 2 can be undertaken separately**

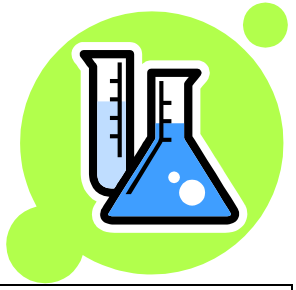
| | |
|---|---|
| **UNIT 1** | **How do living things stay alive?**<br>Students study the activities of cells and their structure and function including the composition of cells. Cell replication is introduced. The transport processes across plasma membranes are investigated. Common requirements of living things including energy, nutrients and exchange of gases are studied. They analyse types of adaptations that enhance the organism's survival in a particular environment and consider the role homeostatic mechanisms play in maintaining the internal environment. Students consider how the planet's biodiversity is classified and the factors that affect the growth of a population.<br>Students conduct practical investigations to assist them in developing knowledge and understanding and to illustrate concepts. |

| | |
|---|---|
| **UNIT 2** | **How is the continuity of life maintained?**<br>In this unit students examine the process of DNA replication and compare cell division in both prokaryotic and eukaryotic organisms. Students explore the mechanisms of asexual and sexual reproductive strategies, and consider the advantages and disadvantages of these two types of reproduction. The role of stem cells in the differentiation, growth, repair and replacement of cells in humans is examined, and their potential use in medical therapies is considered. Students study the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses. They investigate the inheritance of autosomal dominant, autosomal recessive and sex-linked genetic conditions. |

Unit 3 & 4 must be undertaken as a sequence. Students entering Unit 3 without Units 1 and/or 2 will be required to undertake additional reading as prescribed by their teacher.

| | |
|---|---|
| **UNIT 3** | **Signatures of life**<br>In this unit students investigate cell functioning, the biochemistry of cells and the role different molecular components play in cellular function and structure. The study of DNA and RNA leads students to investigate the diversity of proteins. Specific examples of the applications of molecular biology are included. Homeostasis, signalling molecules and signal transduction are included in a study of coordination and regulation. Immune responses, disorders of immune response and acquired immunity are investigated. Applications of molecular biology are explored. |
| **UNIT 4** | **Continuity and Change**<br>In this unit students focus on molecular genetics and investigate individual units of inheritance and the genomes of individuals and species. A study of asexually reproducing and sexually reproducing organisms is included. Students undertake practical investigations that involve the manipulation of DNA and inheritance traits. Students investigate changes to species and the process of natural selection. The interaction between human, cultural and technological evolutions and impact on the evolutionary process is studied. Students consider the bioethical issues associated with the application of particular gene technologies. |

# CHEMISTRY
## (SCIENCE)



### Unit 1 & 2

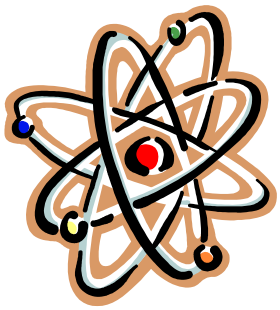
| | |
|---|---|
| **UNIT 1** | **How can the diversity of materials be explained?**<br>The development and use of materials for specific purposes is an important human endeavour. In this unit students investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials. Using their knowledge of elements and atomic structure students explore and explain the relationships between properties, structure and bonding forces within and between particles that vary in size from the visible, through nanoparticles, to molecules and atoms. Students examine the modification of metals, assess the factors that affect the formation of ionic crystals and investigate a range of non-metallic substances from molecules to polymers and giant lattices and relate their structures to specific applications. |

| | |
|---|---|
| **UNIT 2** | **What makes water such a unique chemical?**<br>Students examine the polar nature of a water molecule and the intermolecular forces between water molecules. They explore the relationship between these bonding forces and the physical and chemical properties of water. In this context students investigate solubility, concentration, pH and reactions in water including precipitation, acid-base and redox. Students are introduced to stoichiometry and to analytical techniques and instrumental procedures, and apply these to determine concentrations of different species in water samples, including chemical contaminants. They use chemistry terminology including symbols, units, formulas and equations to represent and explain observations and data from experiments, and to discuss chemical phenomena. Students explore the solvent properties of water in a variety of contexts and analyse selected issues associated with substances dissolved in water. |

Unit 3 & 4 must be undertaken as a sequence. Students entering Unit 3 without Units 1 and/or 2 will be required to undertake additional reading as prescribed by their teacher.

| | |
|---|---|
| **UNIT 3** | **Chemical Pathways**<br>Students investigate the scope of techniques available to the analytical chemist, including how and why the techniques work. They look at organic reaction pathways and the chemistry of particular organic molecules; the role of organic molecules in the generation of biochemical fuels and forensic analysis. Students study the application of principles of green chemistry to chemical processes and use chemical language, formulas and equations to explain observations and data collected from experiments. |
| **UNIT 4** | **Chemistry at work**<br>Students investigate the industrial production of chemicals and the energy changes associated with chemical reactions; the rate and yield or equilibrium position and how these features are used to obtain optimum conditions in the industrial production of a selected chemical. Students look at how energy is produced from available resources and consider the efficiencies, advantages and disadvantages of each energy resource; galvanic cells and electrolytic cells, their operating principles, and applications including fuel cells. They use the language and symbols of chemistry, and chemical formulas and equations to explain observations and data collected from experiments. |

# PHYSICS
## (SCIENCE)



**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **What ideas explain the physical world?**<br>In this unit students consider thermal concepts by investigating heat and assessing the impact of human use of energy on the environment. Students evaluate common analogies used to explain electricity and investigate how electricity can be manipulated and utilised. They examine current scientifically accepted theories that explain how matter and energy have changed since the origins of the Universe.<br>Students undertake quantitative investigations involving at least one independent, continuous variable. |

| | |
|---|---|
| **UNIT 2** | **What do experiments reveal about the physical world?**<br>Students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary. They choose one of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound and sports science.<br>They undertake a student-designed practical investigation related to content drawn from the Motion Topic or one of the optional topics. |

**Unit 3 & 4 must be undertaken as a sequence. Students entering Unit 3 without Units 1 and/or 2 will be required to undertake additional reading as prescribed by their teacher.**

| | |
|---|---|
| **UNIT 3** | **How do fields explain motion and electricity?**<br>In this unit, students explore the importance of energy in explaining and describing the physical world. They examine the production of electricity and its delivery to homes. Students consider the field model as a construct that has enabled an understanding of why objects move when they are not apparently in contact with other objects. They explore the interactions, effects and applications of gravitational, electric and magnetic fields including the design and operation of particle accelerators. Students use Newton's laws and Einstein's theories to investigate and describe motion. |
| **UNIT 4** | **How can two contradictory models explain both light and matter?**<br>Light and matter – which initially seem to be quite different – have been observed as having similar properties. In this unit, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and analyse its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour. A wave model is also used to explain the behaviour of matter which enables students to consider the relationship between light and matter. Students are challenged to think beyond the concepts experienced in everyday life to study the physical world from a new perspective. |

# PSYCHOLOGY
## (SCIENCE)

**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **How are behaviour and mental processes shaped?**<br>In this unit students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system. Students explore brain plasticity and the influence that brain damage may have on a person's psychological functioning. They consider the complex nature of psychological development, including situations where psychological development may not occur as expected. |

| | |
|---|---|
| **UNIT 2** | **How do external factors influence behaviour and mental processes?**<br>A person's thoughts, feelings and behaviours are influenced by a variety of biological, psychological and social factors. In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of an individual and groups |

**Unit 3 & 4 must be undertaken as a sequence**

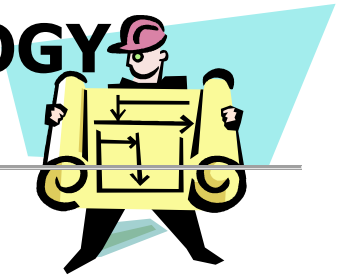
| | |
|---|---|
| **UNIT 3** | This unit focuses on the brain and nervous system as a whole structure and investigates their role in affecting human behaviour. Brain research methods are examined and different approaches of psychology are integrated in a study of visual perception and states of consciousness. Research methods are integrated within the different approaches to psychology and students learn to evaluate the appropriateness of each model. Consideration of ethical principles in the conduct of psychological research and practice is included. |
| **UNIT 4** | In this unit students study cognitive psychological methods through the concepts of memory and learning. Research methods continue to be integrated within different methodological approaches to psychology. Students apply these methods to different studies and make evaluations of the appropriateness of each method. The application and understanding of ethical principles in the conduct of psychological research and practice are extended as students complete a research investigation of their own devising. |

# EXTENDED INVESTIGATION
## (Social Science)


### Unit 3&4 (Note: Units 1 & 2 EI is not available)

| | |
|---|---|
| **UNIT 3** | **Designing an Extended Investigation**<br>Students develop skills in question construction and design, explore the nature and purpose of research, and identify and investigate an individual significant research question. They set the parameters for their research, justify their question, and examine a range of research methods and methodology. Ethics are also investigation. Critical Thinking is explored, using this skill to analyse and evaluate key arguments, evidence, data, and perspectives. Students undertake a Critical Thinking test. They need to work independently throughout their investigation. Students write a research plan, begin research, and present an oral report. |
| **UNIT 4** | **Presenting an Extended Investigation**<br>Students continue their investigation, shaping it into its final presentation format. They produce and submit their final report and present this, orally, to a non-specialist panel. The student report will present and evaluate the results of the extended investigation. The student is required to respond to questions and challenges. They will also reflect on their research findings. Students need to keep a journal log throughout their investigation. |

# PRODUCT DESIGN & TECHNOLOGY
## (TECHNOLOGY)



### Unit 1 & 2 can be undertaken separately

| | |
|---|---|
| **UNIT 1** | **Design Modification and Production**<br>This unit focuses on the analysis, modification and improvement of a product design with consideration of the materials used and issues of sustainability. Many products in use today have been redesigned to suit the changing needs and demands of users but with little consideration of their sustainability. Knowledge of material use and suitability for particular products is essential in product design. Students will look at the Product design process and Product design factors and then produce a re-designed product safely using tools, equipment, machines and materials, compare it with the original design and evaluate it against the needs and requirements outlined in their design brief. |

| | |
|---|---|
| **UNIT 2** | **Collaborative Design**<br>In this unit students work in teams to design, develop, produce and evaluate an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including: human needs and wants; function, purpose and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution. The students are able to gain inspiration from an historical and/or a cultural design movement or style and its defining factors such as ideological or technological change, philosophy or aesthetics. |

### Unit 3 & 4 must be undertaken as a sequence

| | |
|---|---|
| **UNIT 3** | **Design, Technical Innovation & Manufacture**<br>In this unit, students investigate a client or end-user's needs, prepare a design brief, devise evaluation criteria, carry out research and propose a series of design options. They justify the choice of a preferred design option and develop a work plan, and commence production of the product, which will be completed and evaluated in Unit 4. This unit also examines how a range of factors influence the design and development of products within industrial/commercial settings. |

| | |
|---|---|
| **UNIT 4** | **Product Development, Evaluation and Promotion**<br>Students continue to develop and manufacture the product designed in Unit 3, and record the production processes and modifications to the work plan and product. They evaluate the effectiveness and efficiency of techniques they used and the quality of their product with reference to evaluation criteria. Students make judgments about possible improvements. They promote their work by highlighting the product's features to the client and/or end-user. |

# FOOD AND TECHNOLOGY
## (TECHNOLOGY)

### Unit 1 & 2 can be undertaken separately

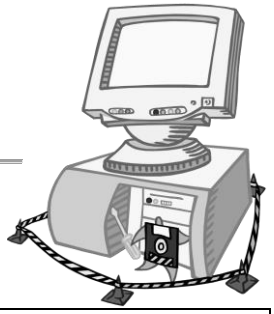
| | |
|---|---|
| **UNIT 1** | **Food Safety and Properties of Food**<br>Students study and apply safe and hygienic food handling and storage practices in the preparation of food. They consider food preparation practices suitable for use in a small-scale food operation, such as in the home. Students consider and use a range of tools and equipment used in food preparation. They examine the links between classification of foods and their properties, and use different preparation and processing techniques. They investigate quality and ethical considerations in food selection. Students use the design process to meet the requirements of design briefs to maximise the qualities of key foods. |

| | |
|---|---|
| **UNIT 2** | **Planning and preparation of food**<br>Students investigate the most appropriate tools and equipment, including the latest developments in food technology. They research, analyse and apply the most suitable food preparation, processing and cooking techniques to optimise the physical, sensory and chemical properties of food. They use the design process to respond to challenges of preparing food safely and hygienically for a range of contexts and consumers. Students also explore environmental considerations when planning and preparing meals. |

### Unit 3 & 4 must be undertaken as a sequence

| | |
|---|---|
| **UNIT 3** | **Food Preparation, Processing and Food Controls**<br>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 these techniques. Students devise a design brief from which they develop a detailed design plan including evaluation criteria and then conduct research into the foods they will produce during Unit 4. |
| **UNIT 4** | **Food Product Development and Emerging Trends**<br>Students develop individual production plans for the proposed four to six food items and implement the design plan they established in Unit 3. Students examine food product development, and research and analyse reasons that have contributed to product development. They investigate issues underpinning the emerging trends in product development, including social pressures and consumer demand. Students also investigate food packaging, packaging systems and marketing. |

# INFORMATION TECHNOLOGY
## (TECHNOLOGY)



**Unit 1 & 2 can be undertaken separately**

| | |
|---|---|
| **UNIT 1** | **IT in Action**<br>Students acquire and apply a range of knowledge and skills to manipulate different data types such as numeric, text, sound and images (still and moving) to create solutions that can be used to persuade, educate, inform and entertain. |

| | |
|---|---|
| **UNIT 2** | **IT Pathways**<br>In Area of Study 1 students analyse data from large repositories and manipulate selected data to create visualisations. In Area of Study 2 students develop skills in using programming or scripting language software and they investigate careers that involve the use of these skills. Working in teams is an important and effective strategy for solving problems, and this strategy is applied in Area of Study 3 when students solve problems for clients in the community. |

**Unit 3 & 4 must be undertaken as a sequence**

| | |
|---|---|
| **UNIT 3** | **IT Applications**<br>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.<br>Students also examine techniques used by organisations to acquire data via websites and consider the relationship between how the data is acquired. |
| **UNIT 4** | **IT Applications**<br>In this unit students focus on 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. Either a relational database management system (RDBMS) or spreadsheet software is selected and used to create solutions to information problems.<br>Students also 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. |

# VCAL PERSONAL DEVELOPMENT SKILLS (VCAL)

**The purpose of all PDS units is to:** focus on the development of organisation and planning skills, knowledge, practical skills, problem solving and interpersonal skills through participation in experiences of a practical nature. Each unit varies in the methods and extent to which these are required.

**INTERMEDIATE PERSONAL DEVELOPMENT SKILLS: YEAR 11 LEVEL (ie. Unit 1 & 2 provides the same credit as a VCE Unit 1 & 2 subject)**

| | |
|---|---|
| **UNIT 1** | Students plan and organise a complex activity that requires students to demonstrate:<br>• subject specific knowledge applicable to a relevant personal, social, health & wellbeing, educational and/or family project or activity<br>• skills applicable to the activity<br>• development of self-management skills<br>• development of leadership skills<br>• interpersonal communication skills |

| | |
|---|---|
| **UNIT 2** | Students identify planning and organisational skills relevant to management of a health or community service activity and are required to demonstrate:<br>• subject specific knowledge in regard to community engagement, social awareness, civic & civil responsibility<br>• problem solving and comprehension skills<br>• presentation and research skills<br>• communication skills<br>• planning & organisation skills<br>• teamwork and group cohesion |

**SENIOR PERSONAL DEVELOPMENT SKILLS: YEAR 12 LEVEL**
**(Unit 1/2 Senior PDS can contribute to the ATAR as a 5th or 6th subject)**

| | |
|---|---|
| **UNIT 1** | The focus of this unit is the development of self through the planning of an activity to completion involving a range of related activities that requires students to demonstrate:<br>• subject specific knowledge applicable to a relevant activity<br>• skills applicable to the activity<br>• understanding of cultural values and cultural awareness<br>• organisational skills, leadership and decision making skills for group or team |
| **UNIT 2** | Students are to manage the coordination of an activity or program within the community that requires them to demonstrate:<br>• subject specific knowledge applicable to community engagement, social awareness, civic and civil responsibility<br>• skills applicable to the activity<br>• project management and coordination skills including goal setting<br>• evaluative and problem-solving skills<br>• introduction to skills for communicating, planning, organising and working in teams. |

# VCAL WORK RELATED SKILLS

**The purpose of all WRS units 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 learners with a capacity to consider and choose from a range of pathways.

## INTERMEDIATE WORK RELATED SKILLS: YEAR 11 LEVEL
## (ie. Unit 1 & 2 provides the same credit as a VCE Unit 1 & 2 subject)

| | |
|---|---|
| **UNIT 1** | Students must demonstrate competency in the following learning outcomes:<br>• learn about basic conditions & entitlements of a specific industry<br>• obtain & communicate information in response to a work related OH&S issue<br>• develop knowledge & understanding of OH&S in a work related context<br>• identify problems or safety hazards that can affect the safety of the work environment<br>• contribute to team objectives to achieve safe work procedures<br>• use information & communications technology in relation to a work related activity |

| | |
|---|---|
| **UNIT 2** | Students must demonstrate competency in the following learning outcomes:<br>• learn to analyse & organise information for a work related goal<br>• communicate information & ideas for a work related goal<br>• plan, organise & manage activities for a work related goal<br>• identify & solve problems for a work related purpose<br>• work with others & in teams to achieve a work related goal<br>• use information & communications technology in relation to a work related activity |

## SENIOR WORK RELATED SKILLS: YEAR 12 LEVEL
## (Unit 1/2 Senior PDS can contribute to the ATAR as a 5th or 6th subject)

| | |
|---|---|
| **UNIT 1** | Students must demonstrate competency in the following learning outcomes:<br>• research information about the career pathways, functions & layout of a specific industry or workplace<br>• communicate ideas & information about OH&S requirements for a work environment<br>• assist in the Hazard Identification Risk Assessment & Control Planning Process to meet OH&S information in the work environment<br>• develop an OH&S plan for a work environment that addresses OH&S issues<br>• work with others & in teams in a work environment in accordance with defined workplace procedures<br>• use ICT in relation to a complex work related activity<br>• use technology in accordance with OH&S guidelines in a work related context |
| **UNIT 2** | Students must demonstrate competency in the following learning outcomes:<br>• collect, analyse & evaluate information in a work environment<br>• plan, organise & manage activities in a work environment, incorporating QA processes<br>• identify & solve problems in a work environment<br>• work with others & in teams in a work environment<br>• use information & communications technology in relation to a complex work related activity<br>• identify, apply & evaluate technology in a work environment<br>• show enterprise & identify opportunities in work processes |

# VCAL LITERACY SKILLS

**The purpose of the VCAL LITERACY strand:** is to enable the development of skills, knowledge and attitudes in literacy that allows for progression in the main social contexts of family, employment, further learning and citizenship. Literacy skills corresponding with these social contexts include literacy for self-expression, practical purposes, knowledge and public debate. Literacy also includes reading, writing and oral communication skills.

## INTERMEDIATE LITERACY SKILLS: YEAR 11 LEVEL

| | |
|---|---|
| **Reading and Writing** | To be credited with the Reading and Writing component of Literacy at Intermediate level, students must demonstrate competency in the following learning outcomes:<br>• writing for self expression - write a recount, narrative or expressive text<br>• writing for practical purposes - write an instructional or transactional text<br>• writing for knowledge - write a report or explanatory text<br>• writing for public debate - write an argumentative or discursive text<br>• reading for self expression - meaning gained by reading narrative/recount/expressive text<br>• reading for practical purposes - meaning from reading instructional or transactional text<br>• reading for knowledge - meaning from reading explanatory/informative text<br>• reading for public debate - meaning from reading persuasive or argumentative text |

| | |
|---|---|
| **Oral Communication** | To be credited with the Oral Communication component of Literacy at Intermediate level, students must demonstrate competency in the following learning outcomes:<br>• oracy for knowledge - respond to spoken language in informative talks<br>• oracy for practical purposes - use & respond to language in instructions/ transactions<br>• oracy for exploring issues and problem solving - spoken language in discussions to explore issues |

## SENIOR LITERACY SKILLS: YEAR 12 LEVEL

| | |
|---|---|
| **Reading and Writing** | To be credited with the Reading and Writing component of Literacy at Senior level, students must demonstrate competency in the following learning outcomes:<br>• writing for self expression - write a complex recount, narrative or expressive text<br>• writing for practical purposes - write a complex instructional or transactional text<br>• writing for knowledge - write a complex report or explanatory text<br>• writing for public debate - write a complex argumentative or discursive text<br>• reading for self expression - meaning gained by reading narrative/recount/expressive text<br>• reading for practical purposes - meaning from reading instructional or transactional text<br>• reading for knowledge - meaning from reading explanatory/informative text<br>• reading for public debate - meaning from reading persuasive or argumentative text |
| **Oral Communication** | To be credited with the Oral Communication component of Literacy at Senior level, students must demonstrate competency in the following learning outcomes:<br>• oracy for knowledge - respond to spoken language in informative talks<br>• oracy for practical purposes - use & respond to language in instructions/ transactions<br>• oracy for exploring issues and problem solving - spoken language in discussions to explore issues |

# VCAL NUMERACY SKILLS

**The purpose of the NUMERACY strand is to:** develop mathematical skills in order to carry out purposes and functions within society related to designing, measuring, constructing, using graphical information, money, time and travel, and the underpinning skills and knowledge for further study in mathematics or related fields. The curriculum in this strand develops skills to facilitate the practical application of mathematics at home, work and in the community.

## INTERMEDIATE NUMERACY SKILLS: YEAR 11 LEVEL

| | |
|---|---|
| **Learning Outcomes** | Students must demonstrate competency in five out of the six following learning outcomes to be credited with Intermediate Numeracy Skills:<br>• numeracy for practical purposes - Design<br>• numeracy for practical purposes – Measuring<br>• numeracy for personal organisation – Money and Time<br>• numeracy for personal organisation – Location<br>• numeracy for interpreting society – Data<br>• numeracy for interpreting society – Numerical Information |

## SENIOR NUMERACY SKILLS: YEAR 12 LEVEL

| | |
|---|---|
| **Learning Outcomes** | Students must demonstrate competence in six out of the following seven learning outcomes to be credited with this unit:<br>• numeracy for practical purposes – Design<br>• numeracy for practical purposes – Measuring<br>• numeracy for personal organisation – Location<br>• numeracy for interpreting society – Data<br>• numeracy for interpreting society – Numerical Information<br>• numeracy for knowledge – Further Study in Maths (formulae)<br>• numeracy for knowledge – Further Study in Maths (problem solving) |