Year 10 is a year to consolidate skills and understandings and to prepare for the VCE with a major highlight being Politics Week. In addition to the core subjects of English, Mathematics, Science, History and Physical Education, a strong emphasis is placed on the development of independent study skills and revision strategies to enable our students to select a course of study that best suits their strengths.

Core Subjects

English

<table>
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<tr>
<th>Term 1</th>
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<tbody>
<tr>
<td>Who Am I?</td>
<td>Walk a mile in someone else's shoes.</td>
<td>Tales of Modern Day Madness</td>
<td>The King's Speech</td>
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<tr>
<td>Students will understand how ideas can be explored in a variety of genres. They will consider the development of key concepts in a range of texts, specifically Mao's Last Dancer. Students will consider the elements of good writing and draw on this knowledge to create their own texts.</td>
<td>Students will understand how the style of a text influences its reading. They will learn how to trace character development and relationships. Students will prepare creative and analytical responses in relation to the novel, The Curious Incident of the Dog in the Night-time. They will study a current media issue and learn how to analyse persuasive language.</td>
<td>Students will understand a rich array of concepts through the study of a range of text types. They will draw on the various structural and stylistic conventions of published writers to create their own texts. The unit is focussed on a number of contemporary short stories.</td>
<td>Students will understand how films evoke a response in viewers. They will track motifs, gain an appreciation of mise-en-scene and offer interpretations of filmic devices such as camera angles, shots and the framing of a piece.</td>
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Mathematics - Core

Indices, Linear Algebra, Linear Graphs

Students will understand how to simplify algebraic products and quotients using index laws. They will substitute values into formulae to determine unknowns and apply the four operations to simple algebraic fractions with numerical denominators. Students will understand how to solve problems involving linear equations. They will understand the process of sketching linear graphs and finding gradients and intercepts. They will also solve problems using parallel and perpendicular lines.

Simultaneous Equations, Linear Inequalities, Pythagoras’ Theorem, Trigonometry, Geometry

Students will understand how to solve linear simultaneous equations, using algebraic and graphical techniques including using the CAS calculator technology. They will solve linear inequalities and graph their solutions on number lines and on half planes.

Students will understand how to solve right-angled triangle problems including those involving direction, angles of elevation and three-dimensions. They will also understand the concepts of similarity and congruence and the application of this to solve problems involving shapes.

Students will understand the concepts of Trigonometry and the corresponding ratios.

Students will understand how to solve problems involving surface area and volume for a range of prisms, cylinders and composite shapes.

Expanding and Factorising Binomial Expressions, Solving and Graphing Functions, Statistics and Probability

Students will understand the process of expansion and factorisation of quadratic expressions. They will be able to solve quadratic equations by a range of strategies. They will explore the connection between algebraic and graphical representations of relations such as quadratics, circles and exponentials, including the use of the CAS calculator as appropriate.

Students will understand how to describe the results of two and three step chance experiments, assign probabilities to outcomes and determine probabilities of events. They will also investigate the concept of independence and understand the language of probability.

Financial Mathematics

Students will understand the statistical concepts of quartiles and inter quartile range. They will understand how to construct statistical representations such as box plots, histograms, dot and scatter plots. They will also understand how to evaluate statistical reports in the media.

Students will understand the processes and applications of percentages relating to financial mathematics including: discounts; purchasing goods; credit card payments; saving and borrowing; simple and compound interest; and depreciation.

Mathematics - Basic

PERCENTAGES AND APPLICATIONS

Students will understand the processes and applications of percentages relating to financial mathematics including: discounts; purchasing goods; credit card payments; saving and borrowing; simple and compound interest; and depreciation.

TRIGONOMETRY

Students will use trigonometry and Pythagoras' theorem to find unknown side lengths and angles in right-angled triangles. They will apply trigonometry skills to practical problems involving bearings and angles of elevation and depression.

LINEAR ALGEBRA

Students will understand how to simplify algebraic fractions using the four operations. They will simplify expressions by collecting like terms and evaluate expressions by substituting. They will also solve linear equations and word problems requiring a linear equation to be formed and solved.

COORDINATE GEOMETRY

Students will understand how to sketch linear equations on a Cartesian plane and determine the equation of a line given its graph or other relevant information. They will calculate the distance and midpoint between two points and use the relationships between parallel and perpendicular lines to solve problems.
## Year 10 Curriculum Overview

### Science

1. **Getting into Genes (Biological Sciences)**
   - Students will understand the transmission of heritable characteristics from one generation to the next involves DNA and genes.

2. **Forces, energy and motion (Physical Sciences)**
   - Students will understand energy conservation in a system can be explained by describing energy transfers and transformations. The motion of objects can be described and predicted using the law of physics.

3. **Chemical Patterns (Chemical Sciences)**
   - Students will understand the atomic structure and properties of elements are used to organise them in the periodic table. Different types of chemical reactions are used to produce products and can occur at different rates.

4. **Evolution (Biological Sciences)**
   - Students will understand that the theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence.

5. **The mysterious Universe (Earth and Space Sciences)**
   - Students will understand the Universe contains features including galaxies, stars and solar systems, and the Big Bang Theory can be used to explain the origin of the universe.

6. **Global systems (Earth and Space Sciences)**
   - Students will understand global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere.

### History

- Students will understand the way in which popular culture molded Australian society. They will investigate how this changed in nature and what it means to be Australian. They will determine the continuity and change in music, sport, film, gaming, social media, fashion, radio and television.

- Students will understand the nature and the causes of the Second World War. They will investigate how the end of the First World War had a direct impact on the causes of this conflict and how this shaped the nature of the fighting during this time.

- Students will understand that Australia was fundamentally changed due to our involvement in the fighting in the Second World War. They will study the European and Pacific Theatres of WWII including key events, leaders and resources.

- Students will understand the Civil Rights movement in Australia and the United States following the formation of the Declaration of Human Rights by the United Nation. They will investigate the causes and nature of the protests and how Aboriginal protestors were shaped by the events and people of the United States in their fight for equality.

### Physical Education

- Students will understand the skills and concepts involved in swimming, athletics, fitness and handball and touch football.

- Students will understand the skills and concepts involved in volleyball, lawn bowls, soccer, netball and fitness.

### Elective Subjects

#### Commerce

- Students will understand basic concepts of saving and investment, compound interest, the impact of tax, fees and inflation on the real value of an investment, and the accumulation and draw-down stages of superannuation. They will also understand how to plan, implement and report on a business venture and how the law changes. They will appreciate psychopathic behavior and how criminology is used to evaluate this behaviour.

- Students will understand the characteristics of economic fluctuations and the concepts of trade cycles, production, unemployment, inflation, demand and policies to control trade cycles. They will also understand the concept of the public good and the difficulties in public policy. Studies include the causes of criminal behaviour, the operations of the jury system and the debate about sentencing options and life in prison.

### Dance VCE Units 1 and 2

- Students will understand how knowledge and understanding of the body helps a dancer better perform a movement. They will also understand the concepts of 'safe dance' as well as what criteria are necessary in order to choreograph a technical solo. Finally, they will understand the process of learning a dance as well as how to analyse that experience.

- Students will understand the impact of cultural influences on a choreographer. They will understand how to choreograph a compositional solo as well as understand how to communicate a concept or idea through dance.
## Year 10 Curriculum Overview

### Design Technology

**TECHNICAL DRAWING**
- Students will understand how to prepare designs for the construction of a cabinet using SolidWorks CAD and technical drawing skills.
- **MATERIALS**
- Students will understand how to cut and assemble a range of timber joints using a variety of softwoods and hardwoods.
- **CONSTRUCTION:**
- Students will understand how to follow their plans and construct a piece of furniture, safely using specialised tools and equipment.

**TECHNICAL DRAWING**
- Students will understand how to prepare designs for a metal framed pushcart.
- **MATERIALS**
- Students will understand how to shape and join steel components.
- **CONSTRUCTION:**
- Students will understand how to follow their plans and construct a human-powered vehicle safely using specialised tools and equipment.

### Drama VCE Units 1 and 2

Students will understand creating, presenting and analysing devised performances that includes real or imagined characters, based on personal, cultural or community experiences and stories. Students examine storytelling through the creation of solo and ensemble devised performances. They manipulate expressive skills in the creation and presentation of characters in both naturalistic and non-naturalistic styles.

Students will understand the use and documentation of the processes involved in constructing a performance. Students create, present and analyse a performance focusing on either a contemporary or historical Australian context. Students use a range of stimulus material and performance styles. Theatrical conventions appropriate to the selected performance styles are also explored. Students' knowledge of how dramatic elements are enhanced or manipulated through performance is further developed.

### French

**Hier et Aujourd'hui (Yesterday and Today)**
- Students will understand perfect and imperfect tenses, irregular verb forms, time expressions, negatives and question formations.

**Le Cinéma Français et La Poésie**
- Students will understand how to write a film review and appreciate the work of Marcel Pagnol.

**Demain (Tomorrow)**
- Students will understand the simple future tense and how to apply in context and in making predictions.

**Un Séjour Linguistique en France (A language exchange in France)**
- Students will understand how to make arrangements and host an exchange student and the uses of the three tenses: past, present and future.

**La Vie Scolaire en France et en Australie**
- Students will understand the use of object pronouns and the conditional mood. They will appreciate how to formulate opinions on education.

**La Génération de Transition**
- Students will understand compound tenses, sequence of tenses and significance of new technologies.

**Si Clauses and Compound Tenses**
- Students will understand the formation and application of compound tenses.

**La Vie Active**
- Students will understand about the world of work and various career pathways.

### Food Technology

**Gourmet Globetrotting**
- Students will understand how Australia's modern food culture has evolved. This includes discovering indigenous ingredients, the implication of various historical events, and food trends which have emerged due to technological advances. Students will prepare dishes using ingredients, equipment, cooking and presentation styles from a variety of cultures.

**Cafe Culture**
- Students will create dishes using a range of ingredients, equipment, cooking and presentation styles from a typical cafe menu. They will design their own cafe concept and create a menu following that theme. They will follow a design brief to prepare and photograph a picnic hamper.

### General Mathematics - Further VCE Unit 1

Students will understand statistics and probability: displaying, sampling and interpreting data. A study of financial arithmetic, sequences and series and number systems is undertaken. Linear modeling, sketching and interpretation of graphs, linear and non-linear relations and their equations will be understood. Shape and measurement, coordinate geometry and the use of trigonometric ratios are used to solve practical problems.

Students will understand data analysis and applications, number patterns, geometry and trigonometry, graphs and relations.

### Geography Units 1 and 2

Students will understand the geographic characteristics of natural landscapes and explain how they are developed by natural processes, including extreme natural events. They will also understand how to analyse and explain the changes in natural environments due to natural processes and human activity. They will understand how to conduct fieldwork and collect and process data that can be represented using a range of geographic techniques and media.

Students will understand how to describe and explain the geographic characteristics of different types of rural and urban environments and analyse and explain changes due to human activities. They will appreciate how to sort, process and represent spatial data related to the formation of natural landscapes using GIS (Geographic Information Systems).
### Year 10 Curriculum Overview

#### Indonesian

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<td>Ilkil di Indonesia (Weather in Indonesia)</td>
<td>Students will understand how to describe the weather, enquire about seasons, ask what to take, read basic weather forecasts. They will also understand the use of object focus form and the use of makin lama makin and kalau dibandingkan dengan.</td>
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<tr>
<td>Berkunjung ke Indonesia (Visiting Indonesia)</td>
<td>Students will write a 10-day journal entry about a trip to and throughout Indonesia. They will learn how to adopt a personal, journal entry-style of writing, at the same time as learning about different parts of Indonesia. They will also understand the use of yang, semoga, mudah-mudahan, and moga-moga.</td>
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<tr>
<td>Musik di Indonesia (music in Indonesia)</td>
<td>Students will understand western influence in Indonesian music. They will also understand the use of me-i-yang, the use of transitive verbs with the suffix ‘i’ and ‘kan’, and how to write to a magazine. Lingkungan (environment) Students will understand how to discuss the environment in Indonesia and how to explain causes, reasons and consequences of certain actions.</td>
</tr>
<tr>
<td>Upacara dan Perayaan (Ceremonies and Celebrations)</td>
<td>Students will understand how to read formal invitations, write formal invitations, and describe Muslim, Christian and Hindu ceremonies. Cerita Dari masa lampau (A story from the past) Students will understand the story of ‘Kartini’ and her contribution to women in Indonesia.</td>
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#### Information Technology VCE Units 1 and 2

| Students will understand how to develop and use databases and web pages to analyse an ICT issue. Students will also understand problem solving methodology and networking topologies and protocols. | Students will understand how individuals and organisations use ICT. They will also understand how to create solutions and information products that meet personal and clients’ needs. They will appreciate how networked information systems are used within organisations. |

#### Music

| Students will understand research, analytical skills (listening and score reading), melodic and rhythmic transcription, recognition and writing of intervals, chords, scales, rhythms and creative composition. These skills are all integrated into the study of the Baroque Period, Impressionism and Musical Theatre. | Students will understand research, analytical skills (listening and score reading), melodic and rhythmic transcription, recognition and writing of intervals, chords, scales, rhythms, creative composition and performance. These skills are all integrated into the study of Expressionism and Film Music, Nationalism and Conducting. |

#### Sound Engineering

| Students will understand the elements of sound recording and reproduction systems. They will understand how to select and use suitable microphones and recording equipment for specific recording tasks. They will understand the importance of caring for cables and equipment for maintaining signal integrity. They will understand how to use multi-track recording and editing software to produce stories and soundscapes. | Students will gain a basic understanding of sound and acoustics and the acoustic properties of rooms with different shapes and sizes. They will extend their understanding of the use of multi-track recording and editing software to gain a greater awareness of the techniques used by sound engineers. |

#### Visual Art

| Perspectives and Viewpoints Students will understand still life from different perspectives becoming engaged through a pencil artwork as they explore composition and collage. | Surrealist Painting Students will understand the concepts and skills used in the period for drawing and painting and create a finished Oil painting on canvas. |
| Photography Students will understand the skills and techniques used in photography. They will produce a series of photographs for a finished folio of work that will include thematic planning, composition, lighting and editing to demonstrate their skills. | Wearable Art Students will understand the notion of wearable art. They will produce works in many different media and materials reflecting a conceptual approach for a final presentation or installation work. |

#### Visual Communication Design

| Students will understand the basic principles of drawing systems through practical application and developing skills in technical drawing and rendering. Students will also understand the design process by analysing and evaluating existing design communications. Students will understand how to apply the design process by working from a design brief to produce a design solution. Students will appreciate how to design the environment in Indonesia and how to explain causes, reasons and consequences of certain actions. Students will understand the notion of wearable art. They will produce works in many different media and materials reflecting a conceptual approach for a final presentation or installation work. | Students will understand the more advanced principles of drawing systems through practical application, and will understand how to apply the design process by working from a design brief to produce a design solution. Students will also understand the design process of more complex projects by analysing and evaluating existing design communications. Students will understand the more advanced principles of drawing systems through practical application. Students will apply the design process through a variety of observation, visualisation and presentation drawings. Students will develop and apply design thinking, through the application of creative, critical and reflective techniques, which support skill development. Students will understand how to apply digital and non-digital applications to make visual communications. |
Year 10 Curriculum Overview

Elective Semester Subjects (Repeated Terms 3 & 4)

**Media**

Students will appreciate how to identify and discuss the ways representations are used in the media. They will understand how to operate a video camera and learn skills in cinematography. Students will also understand how to create a short narrative from script writing and storyboarding through to editing and post production.

**Politics**

Australia: Post 9/11

Students will gain an understanding of Australia’s crucial role in a politically unstable and socially dynamic region, by focusing on Australia’s post-9/11 foreign policy paradigm shift in relation to the ‘arc of instability’ in the Asia Pacific. In this course students will examine three case studies: Timor-Leste (East Timor), Solomon Islands, and Fiji. Students will also understand the differing modes by which the Australian Government has sought to ensure stability in these countries in order to better achieve its national interest.