



**Kerang Technical High School**

# **Junior School Handbook**

2022







## Principal's Message

There are many things to consider to ensure the school is the best fit for your child's learning and development. This includes location, transport, curriculum focus, facilities and extra curricula activities to name a few.

It is with great pleasure that I take this opportunity to welcome you to Kerang Technical High School. I believe Kerang Technical High School provides the right mix of academic, elective and extra curricula activities to make it the best possible setting for your child. As a parent I would want to know that my child is happy at school, that my child is safe at school and that my child is receiving the best possible education. The staff, structures, and procedures in place at Kerang Technical High School ensure that this is the case. With a caring staff and an open door policy we like to work closely with all parents to make sure that students have the best possible opportunities academically and socially to be their best. If an issue arises we are keen for parents to contact the school so we can work closely with them to resolve it as quickly as possible. No question is too small and no issue is unimportant to us.

One of our strengths is the diversity of subjects we are able to offer. In Year 7 students will be introduced to a range of different subjects. This will give everyone a taste of what is on offer and, as they progress through the years, they will be able to specialise, targeting those subjects they most enjoy. Students are exposed to further subjects in Year 8 such as Agriculture and Visual Communication and Design, whilst in Year 9 and Year 10, students are able to tailor their education specifically to their career path.

The building modernisation program has been completed with Kerang Technical High School now offering state of the art facilities, including a new Food Technology complex built, the Library transformed into a 21st century learning space and the Art rooms incorporated into the Technology wing. These are exciting times.

Finally, I would like to recommend Kerang Technical High School to you. Over the years we have had students achieve excellent results, both academically and in the trade subjects. This has occurred in a safe and caring environment. I look forward to developing the partnership with you and your family, enriching your lives and the school's both this year and for the remainder of your child's schooling.

For more information visit our Web Page at [www.kerangths.vic.edu.au](http://www.kerangths.vic.edu.au) or our Facebook page <https://www.facebook.com/KerangTHS/>

Mr. Dean Rogers - *Principal*

# Overview of the Curriculum

The Victorian Curriculum F–10 includes both knowledge and skills. These are defined by learning areas and capabilities. This curriculum design assumes that knowledge and skills are transferrable across the curriculum and therefore are not duplicated. For example, where skills and knowledge such as asking questions, evaluating evidence and drawing conclusions are defined in Critical and Creative Thinking, these are not duplicated in other learning areas such as History or Health and Physical Education. It is expected that the skills and knowledge defined in the capabilities will be developed, practised, deployed and demonstrated by students in and through their learning across the curriculum.

The design of the Victorian Curriculum F–10 is set out below:

Learning areas	Capabilities
<p><b>The Arts</b></p> <ul style="list-style-type: none"> <li>• Dance</li> <li>• Drama</li> <li>• Media Arts</li> <li>• Music</li> <li>• Visual Arts</li> <li>• Visual Communication Design</li> </ul> <p><b>English</b></p> <p><b>Health and Physical Education</b></p> <p><b>The Humanities</b></p> <ul style="list-style-type: none"> <li>• Civics and Citizenship</li> <li>• Economics and Business</li> <li>• Geography</li> <li>• History</li> </ul> <p><b>Languages</b></p> <p><b>Mathematics</b></p> <p><b>Science</b></p> <p><b>Technologies</b></p> <ul style="list-style-type: none"> <li>• Design and Technologies</li> <li>• Digital Technologies</li> </ul>	<p>Critical and Creative Thinking</p> <p>Ethical</p> <p>Intercultural</p> <p>Personal and Social</p>

# Structure & Implementation

Domain	Year 7	Year 8	Year 9	Year 10
<b>English</b>	English	English	English	English
<b>Mathematics</b>	Mathematics	Mathematics	Mathematics	Mathematics
<b>Science</b>	Science	Science	Science	Science
<b>Health &amp; Physical Education</b>	<ul style="list-style-type: none"> <li>• Health</li> <li>• Physical Education</li> </ul>	<ul style="list-style-type: none"> <li>• Health</li> <li>• Physical Education</li> </ul>	<ul style="list-style-type: none"> <li>• Health</li> <li>• Physical Education</li> </ul>	<ul style="list-style-type: none"> <li>• Health</li> <li>• Physical Education</li> </ul>
<b>Humanities</b>	<ul style="list-style-type: none"> <li>• History</li> <li>• Geography</li> </ul>	<ul style="list-style-type: none"> <li>• History</li> <li>• Geography</li> <li>• Careers</li> </ul>	<ul style="list-style-type: none"> <li>• History</li> <li>• Geography</li> <li>• Careers</li> <li>• Business Studies</li> <li>• Legal Studies</li> </ul>	<ul style="list-style-type: none"> <li>• History</li> <li>• Geography</li> <li>• Business Studies</li> <li>• Legal Studies</li> </ul>
<b>Language</b>	<ul style="list-style-type: none"> <li>• Language</li> </ul>	<ul style="list-style-type: none"> <li>• Language</li> </ul>		
<b>Arts</b>	<ul style="list-style-type: none"> <li>• Art</li> <li>• Music</li> <li>• Language</li> </ul>	<ul style="list-style-type: none"> <li>• Art</li> <li>• Music</li> <li>• Visual Communication Design</li> <li>• Language</li> </ul>	<ul style="list-style-type: none"> <li>• Art</li> <li>• Music</li> <li>• Visual Communication Design</li> </ul>	<ul style="list-style-type: none"> <li>• Art</li> <li>• Music</li> <li>• Visual Communication Design</li> </ul>
<b>Technology</b>	<ul style="list-style-type: none"> <li>• Food Studies</li> <li>• Metalwork</li> <li>• Woodwork</li> <li>• Digital Learning</li> </ul>	<ul style="list-style-type: none"> <li>• Agriculture</li> <li>• Food Studies</li> <li>• Metalwork</li> <li>• Woodwork</li> </ul>	<ul style="list-style-type: none"> <li>• Agriculture</li> <li>• Engineering</li> <li>• Food Studies</li> <li>• Metal Fabrication</li> <li>• Woodwork</li> </ul>	<ul style="list-style-type: none"> <li>• Auto Systems</li> <li>• Engineering</li> <li>• Food Studies</li> <li>• Engineering</li> <li>• Metal Fabrication</li> <li>• Woodwork</li> </ul>

# Proposed Curriculum Structure

<b>Year 7</b>			
<b>Student Grouping</b>	<b>Subject</b>	<b>Periods per Fortnight</b>	<b>Duration</b>
All Year 7 subjects are Completed in form groups (e.g. 7A – 7B)	English Mathematics Health Physical Education Science History/Geography Language	9 9 4 4 7 7 5	Year
	Art Food Studies Music Technology Studies - Metal Technology Studies - Wood Digital Technology	Each class allocated 5 periods per fortnight	3 of these are completed per semester (2 terms)

<b>Year 8</b>			
<b>Student Grouping</b>	<b>Subject</b>	<b>Periods per Fortnight</b>	<b>Duration</b>
Completed in Form Groups (e.g. 8A – 8B)	English Mathematics Science Health & Physical Education Careers Humanities - History & Geography Language	9 9 7 6 2 6 5	Year
	Visual Communication Design Agriculture	6 6	1 Each semester (2 terms)
Electives	Art Food Studies Music Technology Studies - Metal Technology Studies - Wood Digital Technology	Each class allocated 5 periods per fortnight	2 of these are completed per semester (2 terms)

<b>Year 9</b>			
<b>Student Grouping</b>	<b>Subject</b>	<b>Periods per Fortnight</b>	<b>Duration</b>
CORE subjects  Completed in Form Groups (e.g. 9A – 9B)	English Mathematics Science Humanities - History & Geography Careers Physical Education	10 10 8 6 5 6	Year
Electives	Agriculture Art Business Studies Food Studies Engineering Health Legal Studies Metal Fabrication Music Woodwork Visual Communication Design	Each class allocated 5 periods per fortnight	

# Year 7

Year 7 students will complete seven core subjects and 6 semester based subjects.

## Core Subjects

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English  
Health  
Humanities (History/Geography)  
Language - Indonesian  
Physical Education  
Mathematics  
Science

## Semester Based Subjects

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Art  
Digital Technology  
Food Technology  
Music  
Technology Studies: Metal  
Technology Studies: Wood

For all subjects, students will remain in the same class for the whole year.  
Each semester, students will complete three of the six semester-based electives e.g.  
*Semester One - Technology Studies Metal, Food Studies and Art*  
*Semester Two - Technology Studies Wood, Digital Technology and Music*

## AIMS

Year 7 should provide students with an opportunity to:

- Have exposure to a range of subjects across the curriculum;
- Perform to the best of their ability;
- Be motivated towards learning;
- Prepare adequately for Year 8 and their future.

### ***Language mode: Speaking and Listening***

When interacting with others, students explore specialist and technical vocabulary and use language to express social identities. They discuss and present ideas, including about texts. They explore the language of evaluation and substantiation. When speaking to an audience, students deliver structured spoken texts, selecting text types appropriate for purpose and audience, including multimodal or digital elements. They demonstrate an understanding of formal language and use appropriate features of voice.

### ***Language mode: Reading and Viewing***

When reading and viewing, students engage with a range of different types of texts for meaning. They engage with vocabulary and grammatical knowledge, and the ways that different sentence structures extend and explain ideas, how accurate use of tense creates clarity and how punctuation supports meaning. When demonstrating understanding of texts, students explain ways that characters, settings and events combine and create meaning in texts from different historical, cultural or social contexts. They develop opinions about texts through explorations of how literary devices and language features, and still and moving images and sound, create characters, settings and events. They explain and summarise ideas drawn from texts. They describe how texts, including print and digital, are structured for different purposes. They explain how literary devices create meaning and aesthetic qualities. They explore how perspective is created through still images, moving images and sound.

### ***Language mode: Writing***

When creating written and spoken texts, students convey ideas and information to a specific audience. They select textual details from texts appropriate for purpose, and include appropriate multimodal or digital elements. They review and edit their own and others' texts and reflect on these processes. They use text structures that build sequence and cohesion in a text; grammar, including sentence structures, to achieve clarity; and punctuation to support meaning. They use vocabulary that builds specialist and technical knowledge. They experiment with language features and literary devices they have encountered in texts. They use spelling rules and knowledge of word origins to spell unfamiliar words.

### ***Areas studied***

- Author Study Creative Response
- Flash Literacy
- Exploring arguments
- Poetry
- Personal Response to Film Text
- Analytical Response to Text



# Domain: Mathematics

## **Number**

students represent natural numbers in expanded form and as products of prime factors, using exponent notation. They solve problems involving squares of numbers and square roots of perfect square numbers. Students solve problems involving addition and subtraction of integers. They use all 4 operations in calculations involving positive fractions and decimals, choosing efficient mental and written calculation strategies. Students choose between equivalent representations of rational numbers and percentages to assist in calculations and make simple estimates to judge the reasonableness of results. They use mathematical modelling to solve practical problems involving rational numbers, percentages and ratios in spatial, financial and other applied contexts, justifying choices of representation.

## **Algebra**

Students use algebraic expressions to represent situations, describe the relationships between variables from authentic data and substitute values into formulas to determine unknown values. They solve linear equations with natural number solutions and verify their solutions through substitution. Students create tables of values relating to algebraic expressions and formulas, and describe how the values change.

## **Measurement**

Students apply knowledge of angle relationships and the sum of angles in a triangle to solve problems, giving reasons. They establish and use formulas for the areas of triangles and parallelograms and the volumes of rectangular and triangular prisms to solve problems. They describe the relationships between the radius, diameter and circumference of a circle.

## **Space**

Students classify polygons according to their features and design an algorithm to sort and classify shapes. They represent objects two-dimensionally in different ways, describing the usefulness of these representations. They use coordinates to describe transformations of points in the plane.

## **Areas studied**

- Integers, Real Numbers and Place Value
- Patterns and Algebra, Linear and Non-Linear Relationships
- Perimeter, Area and Volume
- Angles, triangles, quadrilaterals and polygons
- Probability
- Statistics
- Problem Solving
- Practical Applications in Mathematics

# Domain: Health and Physical Education

Students investigate strategies and resources to manage changes and transitions and their impact on identities. Students evaluate the benefits of relationships on wellbeing and respecting diversity. They analyse factors that influence emotional responses. They gather and analyse health information. They investigate strategies that enhance their own and others' health, safety and wellbeing. They investigate and apply movement concepts and strategies to achieve movement and fitness outcomes. They examine the cultural and historical significance of physical activities and examine how connecting to the environment can enhance health and wellbeing.

Students explain personal and social skills required to establish and maintain respectful relationships and promote fair play and inclusivity. They justify actions that promote their own and others' health, safety and wellbeing at home, at school and in the community. Students demonstrate control and accuracy when performing specialised movement skills. They apply and refine movement concepts and strategies to suit different movement situations. They apply the elements of movement to compose and perform movement sequences.

### Health

Areas studied
<ul style="list-style-type: none"><li>• Health and Wellbeing</li><li>• Personal Identity and Belonging</li><li>• Building Resilience</li><li>• Respectful Relationships</li><li>• Body Image and Self-esteem</li><li>• Nutrition</li><li>• Personal Safety</li><li>• First Aid</li></ul>



### Physical Education

Areas studied
<ul style="list-style-type: none"><li>• Invasion Games</li><li>• Striking and Fielding Games</li><li>• Net/Wall Sports</li><li>• Athletics</li><li>• Fitness</li></ul>

# Domain: Humanities

## History

Students identify and explain patterns of change and continuity over time. They analyse the causes and effects of events and developments. They identify the motives and actions of people at the time. Students evaluate the significance of individuals and groups and how they were influenced by the beliefs and values of their society. They evaluate different interpretations of the past.

Students sequence events and developments within a chronological framework with reference to periods of time. They locate and select historical sources and identify their origin, content features and purpose. Students explain the historical context of these sources. They compare and contrast historical sources and ask questions about their accuracy, usefulness and reliability. Students analyse the different perspectives of people in the past using sources. They explain different historical interpretations and contested debates about the past. Students construct an explanation using sources of evidence to support the analysis. In developing these texts, and organising and presenting their findings, they use historical terms and concepts, evidence identified in sources, and acknowledge their sources of information.

### Areas studied

- Historical Skills
- Historical Concepts
- Aboriginal and Torres Strait Islander Peoples and Cultures
- European and Mediterranean World – Ancient Egypt
- Asia-Pacific World – Ancient China

## Geography

Students explain processes that influence the characteristics of places. They identify, analyse and explain interconnections and spatial characteristics and identity and explain their implications.

They compare strategies for a geographical challenge, taking into account a range of factors and predict the likely outcomes.

They ethically collect, record and select relevant geographical data and information from useful sources. They select and represent data and information in a range of appropriate forms including maps at different scales that conform to cartographic conventions. They analyse maps and other geographical data and information, and use geographical terminology, to develop identifications, descriptions, explanations and conclusions. They use digital and spatial technologies to represent and analyse data and information.

### Areas studied

- Geographical Skills
- Geographical Concepts
- Water in the World
- Place and Liveability
- Geographical Fieldwork

Students explain how evidence has led to an improved understanding of a scientific idea. They discuss how science knowledge can be applied to generate solutions to contemporary problems and explain how these solutions may impact on society. They investigate different forms of energy and explain how energy transfers and transformations cause change in simple systems. They use examples to illustrate how light forms images. They use a wave model to explain the properties of sound. They use the particle model to predict, compare and explain the physical and chemical properties and behaviours of substances. They describe and apply techniques to separate pure substances from mixtures. They provide evidence for observed chemical changes in terms of colour change, heat change, gas production and precipitate formation. They analyse the relationship between structure and function at cell, organ and body system levels. They identify and classify living things. They explain how living organisms can be classified into major taxonomic groups based on observable similarities and differences. They predict the effect of environmental changes on feeding relationships between organisms in a food web. They distinguish between different types of simple machines and predict, represent and analyse the effects of unbalanced forces, including Earth's gravity, on motion. They compare processes of rock formation, including the time scales involved, and analyse how the sustainable use of resources depends on the way they are formed and cycle through Earth systems. They model how the relative positions of Earth, the Sun and the Moon affect phenomena on Earth. Students identify and construct questions and problems that they can investigate scientifically and make predictions based on scientific knowledge. They plan experiments, identifying variables to be changed, measured and controlled. They consider accuracy and ethics when planning investigations, including designing field or experimental methods. Students summarise data from different sources and construct representations of their data to reveal and analyse patterns and relationships, and use these when justifying their conclusions. They explain how modifications to methods could improve the quality of their data and apply their scientific knowledge and investigation findings to evaluate claims made by others. They use appropriate scientific language, representations and simple word equations to communicate science ideas, methods and findings.

### Areas studied

- Introduction to Science
- Forces
- Sun, Earth & Moon
- States of Matter & Particle Model
- Mixtures & the Water Cycle
- Classification & Ecosystems
- Simple Machines

# Domain: Languages

Students share factual information and opinions about their personal worlds, including personal details, family, pets, friends, pastimes, school and neighbourhood. They interact with others orally and in writing, asking and responding to questions using *Siapa, Apakah, Berapa, Bagaimana, Apa, Di/Ke/Dari mana...?*, and expressing preferences using *saya suka, kurang/tidak suka, mau/tidak mau*. They mostly use correct pronunciation of individual and combined sounds, and use formulaic expressions (for example, *saya tidak tahu, maaf, saya tidak mengerti, sekali lagi*) to sustain interactions. Students describe qualities of appearance, colour, character and condition (such as *tinggi, merah muda, lucu, panas*), and identify quantities using numbers and fractions. They respond to and create texts to describe real and imagined events and characters. Students use the features of a range of personal, informative and imaginative texts and modelled language to assist with structure, flow and coherence in their own speech and writing. They link ideas using conjunctions such as *dan, tetapi, karena* and *untuk*. They form sentences with subject-verb-object construction (*Saya belajar Bahasa Indonesia*), typically using simple base words (*makan, minum, naik, bangun*), *ber-* verbs (*bermain, belajar, berenang, berdansa, berlari*) and formulaic *me-* verbs (*menonton, mendengarkan*). They refer to others using pronouns (*saya, kamu, dia, mereka, Bu/Pak*), and use these in possessive form, including using *-nya* (*sepatunya trendi, filmnya menarik*). They refer to events in time and place using prepositions (*pada, di* and *ke*) as well as time markers such as *sebelum/ sesudah,...yang lalu,...depan*. Students predict meaning based on knowledge of their first language, text features and key words, including loan words from English. They translate texts, identifying culture-specific language such as vocabulary related to cultural artefacts (*gayung, becak, warung*), environment (*sawah, desa, cicak*), and practices such as *Idul Fitri*. Students comment on their experiences of and feelings about using Indonesian, observing how it fits with their sense of self. Students understand that Indonesian is a language used by millions of Indonesians in daily life and that it is constantly changing. They recognise that spoken and written forms of Indonesian can vary, for example, the elision of pronouns and some verbs in speech. They recognise the flexibility of sentence structure while adhering to rules of word order. They are aware that Indonesian uses a base word (*main, makan, tidur, jalan*) and affixation (*ber-, me-* and *-an*) system. They use metalanguage to describe and compare features and rules of sentence construction. Students recognise textual features in a range of text types, such as correspondence, narrative and dialogue. They notice how language changes according to people and their relationships, such as using informal language with friends (*kamu, nggak, hebat*) and formal language with teachers and adults (*Anda, tidak, baik sekali*). Students make connections between aspects of their own language and culture, such as particular expressions or practices, and compare these with Indonesian language and culture.

## Indonesian

### Areas studied

- Greetings
- Introductions
- Geography
- Numbers
- Colours
- How other countries cultures and histories impact ourselves

**Visual Arts**

Students identify, analyse and evaluate how other artists use materials, techniques, technologies, processes and visual conventions to express ideas and convey meaning. Students plan and make their art works in response to exploration of techniques, technologies and processes used in the work of other artists. They demonstrate the use of materials, techniques, processes, visual conventions and technologies to express ideas and convey meaning in their artworks. Students identify and describe artworks and exhibitions from different cultures, times and places and how ideas are interpreted by audiences.

**Areas studied**

- Develop an understanding of the elements and principles of Art
- Exploring a range of art materials and techniques
- Maintain a folio of work
- Create and display artworks
- Discuss the meaning of artworks
- Explore areas of interest

**Music**

Students manipulate the elements of music and stylistic conventions to improvise, compose and perform music. They use evidence from listening and analysis to interpret, rehearse and perform songs and instrumental pieces in unison and in parts, demonstrating technical and expressive skills. They use music terminology and symbols to recognise, describe and notate selected features of music. Students identify and analyse how the elements of music are used in different styles and apply this knowledge in their performances and compositions. They evaluate musical choices they and others have made to communicate ideas and intentions as performers and composers of music from different cultures, times and locations.

**Areas studied**

- Elements of music
- Composing and Performing Music
- Investigating instrumental pieces
- Demonstrating technical and expressive skills
- Composers of music from different cultures
- Evaluating musical choices

# Domain: Technologies

Students explain factors that influence the design of solutions to meet present and future needs. They explain the contribution of design and technology innovations and enterprise to society. Students explain how the features of technologies impact on designed solutions and influence design decisions for each of the prescribed technologies contexts. Students create designed solutions for each of the prescribed technologies contexts based on an evaluation of needs or opportunities. They develop criteria for success, including sustainability considerations, and use these to judge the suitability of their ideas and designed solutions and processes. They create and adapt design ideas, make considered decisions and communicate to different audiences using appropriate technical terms and a range of technologies and graphical representation techniques. Students apply project management skills to document and use project plans to manage production processes. They independently and safely produce effective designed solutions for the intended purpose.

## Food Studies

### Areas studied

- Basic Cookery techniques
- Food Hygiene and Safety
- Basic cookery processes
- Basic food studies terminology
- Understanding recipes
- Analysing and Evaluating food products

## Metalwork

### Areas studied

- Introductory measurement and marking skills
- Introductory to basic hand skills
- Introductory to basic tool use
- Introductory to basic design skills
- Introductory to basic drawing skills
- Introductory OH&S skills

## Woodwork

### Areas studied

- Introductory measurement and marking skills
- Introductory to basic hand skills
- Introductory to basic tool use
- Introductory to basic design skills
- Introductory to basic drawing skills
- Introductory OH&S skills

# **Domain: Technologies (cont)**

## **Digital Technologies**

Students distinguish between different types of networks and their suitability in meeting defined purposes. Students explain how text, image and sound data can be represented and secured in digital systems and presented using digital systems. They analyse and evaluate data from a range of sources to model solutions and create information. They manage the collaborative creation of interactive ideas, information and projects and use appropriate codes of conduct when communicating online. Students define and decompose problems in terms of functional requirements and constraints. They design user experiences and algorithms incorporating branching and iterations, and develop, test, and modify digital solutions. Students evaluate information systems and their solutions in terms of meeting needs, innovation and sustainability.

### **Areas studied**

- Create, present, and analyse data
- Investigate digital systems
- Investigate data transmission
- Use software to research, create, and communicate information
- Use programming language to create a digital game
- Investigate and present information which considers safety and risks in online spaces.



# Year 8

Year 8 students will complete seven core subjects and six semester based subjects – 2 core and 4 electives.

## ***Core Subjects***

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English  
Health & Physical Education  
Humanities (History/Geography)  
Mathematics  
Science  
Careers  
Language- Indonesian

## ***Semester Based Subjects***

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Agriculture  
Visual Communication Design

## ***Semester Based Subjects - Electives***

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Art  
Food Technology  
Music  
Technology Studies: Metal  
Technology Studies: Wood

During Term 3 of Year 7, students will choose their top four electives from the subjects listed above. Students are expected to choose subjects of their interest. Students will be informed of their elective choices by the end of the year.

## ***AIMS***

Year 8 should provide students with an opportunity to:

- Undertake a range of subjects across the curriculum;
- Choose a course to suit their needs and interests;
- Perform to the best of their ability;
- Be motivated towards learning;
- Prepare adequately for Year 10 and Senior School.

### ***Language mode: Speaking and Listening***

When interacting with others, students explore academic vocabulary and use language to support relationships and roles.

They explore and challenge the various meanings in text through discussions with others. They explore rhetorical and literary devices when evaluating and substantiating. When speaking to an audience, students deliver structured spoken texts, selecting text types appropriate for purpose and audience, including multimodal or digital elements. They use language to suit formal and informal contexts, and appropriate features of voice.

### ***Language mode: Reading and Viewing***

When reading and viewing, students engage with a range of different types of texts for meaning. They engage with vocabulary and grammatical knowledge, and the ways that different clause structures add information, the effects of nominalisation and how punctuation supports meaning. When demonstrating understanding of texts, students identify and explain intertextual references, issues and points of view from diverse historical, cultural and social contexts. They explore opinions about texts through explorations of how literary devices and language features, and still and moving images and sound, influence the reader's response to represented values. They analyse and evaluate the ways that ideas are organised in texts. They explain how texts, including print, digital and hybrid, are structured for different purposes. They explore how literary devices, including imagery, create meaning and aesthetic qualities. They explore how still images, moving images and sound use intertextual references to create meaning.

### ***Language mode: Writing***

When creating written and spoken texts, students select and expand on ideas and experiment with language features and literary devices for purpose and effect and include appropriate multimodal or digital elements. They review and edit their own and others' texts and reflect on these processes. They use evidence and substantiation to create cohesion; structure to create sequence; grammar to add information and expand ideas; and punctuation to support meaning. They use vocabulary typical of academic texts, including nominalisation. They experiment with language features and literary devices for effect. They use spelling rules and word origins to learn and accurately spell new words.

### ***Areas studied***

- Crafting creative response to text
- Oral presentation
- Crafting personal response to text
- Crafting written point of view response to issue
- Crafting analytical response and character analysis of text

# Domain: Mathematics

## **Number**

Students recognise irrational numbers as numbers that cannot develop from the division of integer values by natural numbers and terminating or recurring decimals. They apply the exponent laws to calculations with numbers involving positive integer exponents. Students solve problems involving the 4 operations with integers and positive rational numbers. They use mathematical modelling to solve practical problems involving ratios, percentages and rates in measurement and financial contexts.

## **Algebra**

Students apply algebraic properties to simplify, rearrange, expand and factorise linear expressions. They graph linear relations and solve linear equations with rational solutions and one-variable inequalities, graphically and algebraically. Students plot linear and non-linear relations on the Cartesian plane, with and without the use of digital tools. Students use mathematical modelling to solve problems using linear relations, interpreting and reviewing the model in context. They make and test conjectures involving linear relations by developing algorithms and using digital tools.

## **Measurement**

Students use appropriate metric units when solving measurement problems involving the perimeter and area of composite shapes, and volume of right prisms. They use Pythagoras' theorem to solve measurement problems involving unknown lengths of right-angled triangles. Students use formulas to solve problems involving the area and circumference of circles. They solve problems of duration involving 12- and 24-hour cycles across multiple time zones.

## **Space**

Students use 3 dimensions to locate and describe position. They identify conditions for congruency and similarity in triangles and other common shapes, and design and test algorithms to test for congruency and similarity. Students apply the properties of quadrilaterals to solve problems.

## **Areas studied**

- Rational Numbers, Financial Maths, Indices and the Index Laws
- Number Laws and Algebra
- Perimeter and Area of circles, triangles and quadrilaterals and Time
- Congruency of shapes
- Probability
- Statistics
- Problem Solving
- Practical Applications in Mathematics

# Domain: Health and Physical Education

Students investigate strategies and resources to manage changes and transitions and their impact on identities. Students evaluate the benefits of relationships on wellbeing and respecting diversity. They analyse factors that influence emotional responses. They gather and analyse health information. They investigate strategies that enhance their own and others' health, safety and wellbeing. They investigate and apply movement concepts and strategies to achieve movement and fitness outcomes. They examine the cultural and historical significance of physical activities and examine how connecting to the environment can enhance health and wellbeing.

Students explain personal and social skills required to establish and maintain respectful relationships and promote fair play and inclusivity. They justify actions that promote their own and others' health, safety and wellbeing at home, at school and in the community. Students demonstrate control and accuracy when performing specialised movement skills. They apply and refine movement concepts and strategies to suit different movement situations. They apply the elements of movement to compose and perform movement sequences.

### Areas studied

- Invasion Games
- Striking and Fielding Games
- Net/Wall Sports
- Athletics
- Fitness
- Nutrition
- Respectful Relationships
- Alcohol, Smoking & Drugs
- National Physical Activity Guidelines

# Domain: Humanities

## History

Students identify and explain patterns of change and continuity over time. They analyse the causes and effects of events and developments. They identify the motives and actions of people at the time. Students evaluate the significance of individuals and groups and how they were influenced by the beliefs and values of their society. They evaluate different interpretations of the past.

Students sequence events and developments within a chronological framework with reference to periods of time. They locate and select historical sources and identify their origin, content features and purpose. Students explain the historical context of these sources. They compare and contrast historical sources and ask questions about their accuracy, usefulness and reliability. Students analyse the different perspectives of people in the past using sources. They explain different historical interpretations and contested debates about the past. Students construct an explanation using sources of evidence to support the analysis. In developing these texts, and organising and presenting their findings, they use historical terms and concepts, evidence identified in sources, and acknowledge their sources of information.

### Areas studied

- Historical Concepts
- Historical Skills
- European and Mediterranean World – The Vikings & Medieval Europe
- Asia-Pacific World – Japan under the Shoguns
- Expanding Contacts: Discovery and Contact – Renaissance Italy

## Geography

Students explain processes that influence the characteristics of places. They identify, analyse and explain interconnections and spatial characteristics and identity and explain their implications.

They compare strategies for a geographical challenge, taking into account a range of factors and predict the likely outcomes.

They ethically collect, record and select relevant geographical data and information from useful sources. They select and represent data and information in a range of appropriate forms including maps at different scales that conform to cartographic conventions. They analyse maps and other geographical data and information, and use geographical terminology, to develop identifications, descriptions, explanations and conclusions. They use digital and spatial technologies to represent and analyse data and information.

### Areas studied

- Geographical Skills
- Geographical Concepts
- Landforms and Landscapes
- Changing Nations
- Geographical Fieldwork

# Domain: Humanities

### **Economics and Business**

Students describe the interdependence of consumers and producers in the market and explain how markets operate to set prices and why governments may influence the market's operation. They explain the rights and responsibilities of consumers and businesses when making economics and business decisions. Students explain why and how individuals and businesses set, prioritise and plan for financial and organisational goals. They describe the characteristics of successful businesses, the way these businesses use enterprising behaviours and capabilities, and explain how entrepreneurial individuals can contribute to this success. Students discuss how work contributes to societal wellbeing and describe the influences on the work environment. They identify trends and relationships and propose alternative responses to an economics and/or business issue or event. They evaluate the costs and benefits of each alternative response and identify the effects and potential consequences of these actions.

### **Careers**

#### **Areas studied**

- Understand how individual characteristics contribute to achieving goals
- Develop a profile of personal strengths and abilities to improve self-image and self-esteem
- Reviewing skill types and discuss their significance in the world of work.
- Explore how technology requires workers to have a variety of skills.
- Discover the importance of transferable skills
- Explore a variety of workplaces, various work roles and how they contribute to the community.
- Understand how various jobs are dependent on each other and how much our standard of living depends on people being at work

# Domain: Science

Students explain how evidence has led to an improved understanding of a scientific idea. They discuss how science knowledge can be applied to generate solutions to contemporary problems and explain how these solutions may impact on society. They investigate different forms of energy and explain how energy transfers and transformations cause change in simple systems. They use examples to illustrate how light forms images. They use a wave model to explain the properties of sound. They use the particle model to predict, compare and explain the physical and chemical properties and behaviours of substances. They describe and apply techniques to separate pure substances from mixtures. They provide evidence for observed chemical changes in terms of colour change, heat change, gas production and precipitate formation. They analyse the relationship between structure and function at cell, organ and body system levels. They identify and classify living things. They explain how living organisms can be classified into major taxonomic groups based on observable similarities and differences. They predict the effect of environmental changes on feeding relationships between organisms in a food web. They distinguish between different types of simple machines and predict, represent and analyse the effects of unbalanced forces, including Earth's gravity, on motion. They compare processes of rock formation, including the time scales involved, and analyse how the sustainable use of resources depends on the way they are formed and cycle through Earth systems. They model how the relative positions of Earth, the Sun and the Moon affect phenomena on Earth. Students identify and construct questions and problems that they can investigate scientifically and make predictions based on scientific knowledge. They plan experiments, identifying variables to be changed, measured and controlled. They consider accuracy and ethics when planning investigations, including designing field or experimental methods. Students summarise data from different sources and construct representations of their data to reveal and analyse patterns and relationships, and use these when justifying their conclusions. They explain how modifications to methods could improve the quality of their data and apply their scientific knowledge and investigation findings to evaluate claims made by others. They use appropriate scientific language, representations and simple word equations to communicate science ideas, methods and findings.

## Areas studied

- Atoms, Elements & Compounds
- Cells & Microscopes
- Light & Sound
- Rocks, Minerals & Resources
- Body Systems
- Chemical Reactions
- Energy & Renewable Resources

**Visual Arts**

Students identify, analyse and evaluate how other artists use materials, techniques, technologies, processes and visual conventions to express ideas and convey meaning. Students plan and make their art works in response to exploration of techniques, technologies and processes used in the work of other artists. They demonstrate the use of materials, techniques, processes, visual conventions and technologies to express ideas and convey meaning in their artworks. Students identify and describe artworks and exhibitions from different cultures, times and places and how ideas are interpreted by audiences.

**Areas studied**

- Develop an understanding of the elements and principles of Art
- Exploring art materials and techniques
- Create and display artworks
- Discuss the meaning of artworks
- Maintain a folio of work
- Explore areas of personal interest

**Visual Communication Design**

Students identify and describe how designers use visual communication practices to respond to briefs in different historical, social and cultural contexts. They apply this knowledge in the development of their own visual communication practices. Students select and use appropriate drawing conventions, methods, materials, media, design elements and design principles to create effective visual communications. Students evaluate how they and others are affected and influenced by visual communications from different cultures, times and places. They identify and describe practices of visual communication designers in visual communications from different cultures, times and places.

**Areas studied**

- Working to a Design Brief
- Technical Drawing
- Digital Drawing
- Communication Design
- Environmental Design
- Product Design



# Domain: Technologies

Students explain factors that influence the design of solutions to meet present and future needs. They explain the contribution of design and technology innovations and enterprise to society. Students explain how the features of technologies impact on designed solutions and influence design decisions for each of the prescribed technologies contexts. Students create designed solutions for each of the prescribed technologies contexts based on an evaluation of needs or opportunities. They develop criteria for success, including sustainability considerations, and use these to judge the suitability of their ideas and designed solutions and processes. They create and adapt design ideas, make considered decisions and communicate to different audiences using appropriate technical terms and a range of technologies and graphical representation techniques. Students apply project management skills to document and use project plans to manage production processes. They independently and safely produce effective designed solutions for the intended purpose.

## **Metalwork**

<b>Areas studied</b>
<ul style="list-style-type: none"><li>• Workshop safety</li><li>• Flat metal fabrication</li><li>• Product design</li><li>• Design drawing</li><li>• Soldering and Brazing</li><li>• Build your own toolbox or jewellery box</li><li>• Design and make your own acrylic phone or tablet holder</li></ul>



## **Woodwork**

<b>Areas studied</b>
<ul style="list-style-type: none"><li>• Reinforcement of measurement and marking skills</li><li>• Reinforcement of basic hand skills</li><li>• Reinforcement of basic tool use</li><li>• Reinforcement of basic design skills</li><li>• Reinforcement of basic drawing skills</li><li>• Reinforcement of OH&amp;S skills</li></ul>

Students explain factors that influence the design of solutions to meet present and future needs. They explain the contribution of design and technology innovations and enterprise to society. Students explain how the features of technologies impact on designed solutions and influence design decisions for each of the prescribed technologies contexts. Students create designed solutions for each of the prescribed technologies contexts based on an evaluation of needs or opportunities. They develop criteria for success, including sustainability considerations, and use these to judge the suitability of their ideas and designed solutions and processes. They create and adapt design ideas, make considered decisions and communicate to different audiences using appropriate technical terms and a range of technologies and graphical representation techniques. Students apply project management skills to document and use project plans to manage production processes. They independently and safely produce effective designed solutions for the intended purpose.

## **Agriculture**

<b>Areas studied</b>
<ul style="list-style-type: none"><li>• Farm safety</li><li>• The paddock to the plate process</li><li>• Students grow a variety of herbs, fruit and vegetables</li><li>• Livestock: Cattle, Sheep Pigs, Goats and Poultry</li><li>• Livestock production systems: Intensive/extensive</li></ul>



## **Food Studies**

<b>Areas studied</b>
<ul style="list-style-type: none"><li>• Food Hygiene and Safety</li><li>• Cooking Techniques</li><li>• Design Briefs</li><li>• Understanding recipes</li><li>• Analysing and Evaluating food products</li><li>• Safety and technique of using kitchen knives</li></ul>

# Year 9

Year 9 students will complete seven core subjects and six semester based subjects.

## **Core Subjects**

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Careers  
English  
Humanities (History & Geography)  
Language  
Physical Education  
Mathematics  
Science

## **Semester Based Subjects - Electives**

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Agriculture  
Art  
Business Studies  
Food Studies  
Engineering  
Health  
Legal Studies  
Metal Fabrication  
Music  
Woodwork  
Visual Communication Design

Students will also choose three electives for each semester. Students are expected to choose a balanced course of subjects across all learning Domains –English, Health & Physical Education, Humanities, Mathematics, Science, Technology and The Arts, Students will choose their electives for both semesters during Term 3, and will be informed of all subjects they will undertake by the end of the year.

## **AIMS**

Year 9 should provide students with an opportunity to:

- Choose from a range of subjects across the curriculum;
- Choose a course to suit their needs and interests;
- Perform to the best of their ability;
- Be motivated towards learning;
- Prepare well for the transition from school to work and/or further training; and
- Prepare adequately for VCE.

### ***Language mode: Speaking and Listening***

When interacting with others, students explore vocabulary of mood and style and use language to strengthen relationships and roles.

They discuss opinions on texts. They use evaluative and substantiative language to express individual views.

When speaking to an audience, students deliver structured spoken texts, selecting text types appropriate for purpose and audience, including multimodal or digital elements. They demonstrate different levels of formality in their language choice and use appropriate features of voice.

### ***Language mode: Reading and Viewing***

When reading and viewing, students engage with a range of different types of texts for meaning. They engage with vocabulary and grammatical knowledge, including the ways that sentence structures are varied for creative effect and how punctuation supports citation and reference.

When demonstrating understanding of texts, students discuss their responses to texts from diverse historical, cultural and social contexts, and they compare initial and subsequent impressions. They explore different responses, including personal impressions. They analyse how language and/or still and moving images and sound represent values, beliefs and attitudes and are used to shape audiences' preferences. They analyse the relationship between text structures, language features, literary devices and intertextual connections.

They explore how authors adapt and experiment with texts, including print, digital and hybrid, according to purpose. They analyse how literary devices, including poetic features, create meaning and aesthetic qualities. They analyse how symbols in still and moving images, and sound effects, create meaning.

### ***Language mode: Writing***

When creating written and spoken texts, students present ideas through a point of view and/or a voice. They experiment with textual elements and include appropriate multimodal or digital elements. They review and edit their own and others' texts for clarity and control and reflect on these processes.

They experiment with text structures for cohesion and sequence, vary grammar for creative effect and use punctuation to condense and link ideas.

They use vocabulary that contributes to style, mood and tone. They use language features and literary devices to create hybrid texts.

They explore standard and non-standard spelling for creative effect.

### ***Areas studied***

- Exploring arguments and presenting argument analysis
- Analytical response to text and character analysis
- Crafting a personal response to film text
- Oral presentation
- Crafting creative response to text

# Domain: Mathematics

**Number**

Students recognise and use rational and irrational numbers to solve problems.

**Algebra**

Students extend and apply the exponent laws with positive integers and the zero exponent to variables. They expand binomial products and factorise monic quadratic expressions. They find the distance between 2 points on the Cartesian plane, sketch linear graphs and find the gradient and midpoint of a line segment. Students use mathematical modelling to solve problems involving change, including simple interest in financial contexts and change in other applied contexts, choosing to use linear and quadratic functions. They graph quadratic functions and use null factor law to solve monic quadratic equations with integer roots algebraically. Students investigate and describe the effects of variation of parameters on functions and relations, using digital tools where appropriate, and make connections between their graphical and algebraic representations.

**Measurement**

Students apply formulas to solve problems involving the surface area and volume of right prisms, cylinders and composite shapes. They solve problems involving ratio, similarity and scale in two-dimensional situations. They determine percentage errors in measurements. Students apply Pythagoras' theorem and use trigonometric ratios to solve problems involving right-angled triangles. They use mathematical modelling to solve practical problems involving direct and indirect proportion, ratio and scale, evaluating the model and communicating their methods and findings. Students express small and large numbers in scientific notation.

**Space**

Students use 3 dimensions to locate and describe position. They identify conditions for Students apply the enlargement transformation to images of shapes and objects, and interpret results. They design, use and test algorithms based on geometric constructions or theorems.

**Areas studied**

- Financial Maths, Ratios and Rates
- Algebraic Expressions, Indices and the Index Laws and Linear and Non-Linear Expressions
- Surface Area and Volume and Pythagoras' Theorem
- Trigonometry
- Probability
- Statistics
- Problem Solving
- Practical Applications in Mathematics

# Domain: Health and Physical Education

Students critically analyse contextual factors that influence their identities, relationships, decisions and behaviours. They analyse the impact of attitudes and beliefs about diversity on community connection and wellbeing. They evaluate the outcomes of emotional responses to different situations. Students access, synthesise and apply health information from credible sources to propose and justify responses to situations in the home, in the school and the community. Students propose and evaluate interventions to improve fitness and physical activity levels in their communities. They examine the role physical activity has played historically in defining cultures and cultural identities.

Students identify and analyse factors that contribute to respectful relationships. They explain the importance of cooperation, leadership and fair play across a range of health and movement contexts. They compare and contrast a range of actions that could be undertaken to enhance their own and others' health, safety and wellbeing. They apply and transfer movement concepts and strategies to new and challenging movement situations. They apply criteria to make judgments about and refine their own and others' specialised movement skills and movement performances. They work collaboratively to design and apply solutions to movement challenges.

## Physical Education

### Areas studied

- Invasion Games
- Striking and Fielding Games
- Net/Wall Sports
- Athletics
- Fitness
- Dance
- First Aid

## Health

### Areas studied

- Dimensions of Health
- Stages of Life
- Nutrition
- Respectful Relationships
- Drugs, Alcohol & Vaping

# Domain: Humanities

## History

Students refer to significant events, the actions of individuals and groups, and beliefs and values to identify and evaluate the patterns of change and continuity over time. They analyse the causes and effects of events and developments and explain their significance. They explain the context for people's actions in the past. Students evaluate the significance of events and analyse the developments from a range of perspectives. They evaluate the different interpretations of the past and recognise the evidence used to support these interpretations.

Students sequence events and developments within a chronological framework, and identify relationships between events across different places and periods of time. They locate and select historical sources and identify their origin, purpose and content features. Students explain the context of these sources to identify motivations, values and attitudes. They compare and contrast historical sources and evaluate their accuracy, usefulness and reliability. Students analyse the different perspectives of people in the past and evaluate how these perspectives are influenced by the significant events, ideas, location, beliefs and values. They evaluate different historical interpretations and contested debates. Students construct and communicate an argument about the past using a range of reliable sources of evidence. In developing these texts and organising and presenting their arguments, they use historical terms and concepts, evidence identified in sources, and they use consistent referencing of these sources.

### Areas studied

- Historical Skills/Concepts
- The Industrial Revolution
- Colonisation of Australia
- Gold Rushes
- Federation
- World War One

## Geography

Students predict changes in the characteristics of places over time and identify implications of change for the future. They identify, analyse, and explain significant spatial distributions and patterns and significant interconnections within and between places, and identify and evaluate their implications, over time and at different scales.

They evaluate alternative views on a geographical challenge and alternative strategies to address this challenge, using environmental, social and economic criteria, explaining the predicted outcomes and further consequences and drawing a reasoned conclusion.

They ethically collect relevant geographical data and information from reliable and useful sources. They select, organise and represent data and information in different forms, using appropriate digital and spatial technologies and through special purpose maps that conform to cartographic conventions. They analyse and evaluate geographical data, maps and information using digital and spatial technologies and Geographical Information Systems as appropriate to develop identifications, descriptions, explanations and conclusions that use geographical terminology.

### Areas studied

- Geographical Skills
- Geographical Concepts
- Geographies of Interconnections
- Biomes and Food Security
- Fieldwork Investigations

### Economics and Business

Students describe how resources are allocated and distributed in the Australian economy and the way economic performance is measured. They provide explanations for variations in economic performance and standards of living within and between economies. Students explain the importance of managing consumer and business financial risks and rewards and analyse the different strategies that may be used when making decisions. They explain the nature of innovation and why businesses need to create a competitive advantage. Students discuss ways that this may be achieved and the enterprising behaviours and capabilities that could be developed by individuals to assist the work and business environments. Students analyse the reasons why and how the work environment is changing and discuss the implications this has for individuals, businesses and the economy. Students identify economics and business trends, explain relationships and make predictions. They generate alternative responses to familiar, unfamiliar and complex problems taking into account multiple perspectives, and using cost-benefit analysis and appropriate criteria to propose and justify a course of action. Students analyse the intended and unintended effects of economic and business decisions and the potential consequences of alternative actions.

### Careers

#### Areas studied

- Self-development
- Morrisby Profiling
- Resume Writing and Interview Skills
- Career Exploration
- The Work Environment
- Work Futures
- Enterprising Behaviours and Capabilities
- Career Management

### Business Studies

#### Areas studied

- Economic Skills
- Business Skills
- Understanding the Economy
- Consumer and Financial Literacy
- Managing Financial Risks and Rewards
- The Changing Work Environment



# Domain: Humanities

## Civics and Citizenship

Students evaluate features of Australia's political system, and identify and analyse the influences on people's electoral choices. They compare and evaluate the key features and values of systems of government, and analyse Australia's global roles and responsibilities. They analyse the role of the High Court and explain how Australia's international legal obligations influence law and government policy. They explain the key principles of Australia's system of justice and analyse the role of Australia's court system. They analyse a range of factors that influence identities and attitudes to diversity. Students evaluate a range of factors that sustain democratic societies and analyse ways they can be active and informed citizens in different contexts, taking into account multiple perspectives and ambiguities.

## Legal Studies

Areas studied
<ul style="list-style-type: none"><li>• Legal Principles/ Political Concepts</li><li>• Government</li><li>• Democracy</li><li>• Elections</li><li>• How Laws are Made</li><li>• Court Systems</li></ul>

Students analyse how models and theories have developed over time and discuss the factors that prompted their review. They predict how future applications of science and technology may affect people's lives. They explain the concept of energy conservation and model energy transfer and transformation within systems. They analyse how biological systems function and respond to external changes with reference to the interdependencies between individual components, energy transfers and flows of matter. They evaluate the evidence for scientific theories that explain the origin of the Universe and the diversity of life on Earth. They explain the role of DNA and genes in cell division and genetic inheritance. They apply geological timescales to elaborate their explanations of both natural selection and evolution. They explain how similarities in the chemical behaviour of elements and their compounds and their atomic structures are represented in the way the periodic table has been constructed. They compare the properties of a range of elements representative of the major groups and periods in the periodic table. They use atomic symbols and balanced chemical equations to summarise chemical reactions, including neutralisation and combustion. They explain natural radioactivity in terms of atoms and energy change. They explain how different factors influence the rate of reactions. They explain global features and events in terms of geological processes and timescales, and describe and analyse interactions and cycles within and between Earth's spheres. They give both qualitative and quantitative explanations of the relationships between distance, speed, acceleration, mass and force to predict and explain motion. They use the concepts of voltage and current to explain the operation of electric circuits and use a field model to explain interactions between magnets. Students develop questions and hypotheses that can be investigated using a range of inquiry skills. They independently design and improve appropriate methods of investigation including the control and accurate measurement of variables and systematic collection of data. They explain how they have considered reliability, precision, safety, fairness and ethics in their methods and identify where digital technologies can be used to enhance the quality of data. They analyse trends in data, explain relationships between variables and identify sources of uncertainty. When selecting evidence and developing and justifying conclusions, they account for inconsistencies in results and identify alternative explanations for findings. Students evaluate the validity and reliability of claims made in secondary sources with reference to currently held scientific views, the quality of the methodology and the evidence cited. They construct evidence-based arguments and use appropriate scientific language, representations and balanced chemical equations when communicating their findings and ideas for specific purposes.

### Areas studied

- Atoms & Isotopes
- Plate Tectonics
- Electricity
- Control & Coordination
- Diseases
- Chemical Reactions
- Electromagnets

# Domain: The Arts

## Visual Arts

Students analyse and evaluate how artists communicate ideas and convey meaning in artworks. Students identify the influences of other artists and analyse connections between techniques, processes and visual conventions in artworks to develop their own art practice. They select, and manipulate materials, techniques, processes, visual conventions and technologies to express ideas and viewpoints in their artworks. Students analyse and evaluate artworks and exhibitions from different cultures, times and places, and discuss how ideas and beliefs are interpreted by audiences.

### Areas studied

- Develop an understanding of the elements and principles of Art
- Explore drawing, printmaking and clay work
- Document the planning of artworks
- Create and display artworks
- Discuss the meaning of artworks
- Explore areas of personal interest

## Visual Communication Design

Students analyse and evaluate the visual communications they make and view, and how visual communications from different historical, social and cultural contexts communicate ideas and information. Within visual communication fields, students develop briefs and visualise, generate and develop ideas in response to audience needs. They evaluate, reflect on, refine and justify their decisions and aesthetic choices. Students demonstrate their use of visual communication design skills, techniques, conventions and processes in a range of design fields. They manipulate design elements and design principles, materials, methods, media and technologies to realise their concepts and ideas for specific purposes, audiences and needs

### Areas studied

- Design Analysis
- Manual Design methods
- Digital Design methods
- Communication Design
- Environmental Design
- Product Design.

Students explain factors that influence the design of solutions to meet present and future needs. They explain the contribution of design and technology innovations and enterprise to society. Students explain how the features of technologies impact on designed solutions and influence design decisions for each of the prescribed technologies contexts. Students create designed solutions for each of the prescribed technologies contexts based on an evaluation of needs or opportunities. They develop criteria for success, including sustainability considerations, and use these to judge the suitability of their ideas and designed solutions and processes. They create and adapt design ideas, make considered decisions and communicate to different audiences using appropriate technical terms and a range of technologies and graphical representation techniques. Students apply project management skills to document and use project plans to manage production processes. They independently and safely produce effective designed solutions for the intended purpose.

## **Agriculture**

<b>Areas studied</b>
<ul style="list-style-type: none"><li>• Sustainable Agriculture</li><li>• Impact of bees</li><li>• Technology advancements in Agriculture</li><li>• Soils</li><li>• Fencing</li></ul>



## **Engineering**

<b>Areas studied</b>
<ul style="list-style-type: none"><li>• Development of measurement and marking skills</li><li>• Development of hand skills</li><li>• Development of tool and basic machine use</li><li>• Development of design skills</li><li>• Development of drawing skills</li><li>• Development OH&amp;S skills</li></ul>

# **Domain: Technologies**

## **Food Studies**

### **Areas studied**

- Food Hygiene and Safety
- Cooking Techniques and processes
- Design Briefs
- Basic Food Nutrition
- Analysing and Evaluating food products
- Safety knowledge and use of a range of kitchen equipment

## **Metal Fabrication**

### **Areas studied**

- Use of Oxy Acetylene equipment
- Use of Arc Welding equipment
- Design and make a garden ornament
- Design a make an arc welded product
- Design drawing
- Appropriate selection of metals and equipment

## **Woodwork**

### **Areas studied**

- Safe work procedures of specialised equipment
- Mortise and Tenon Joints
- The use of various types of routers
- Refinement of hand skills
- Problem solving skills while following a design process
- Finishing methods and techniques

