GRADE 7
Course Selection Information
2020
Welcome to Kings Meadows High School

Dear Parents/Carers

The publication of this course guide marks the beginning of a very important process – course selection. At Kings Meadows High School we are committed to preparing our students for the changing social, economic and technological society of the 21st century. We know that a high quality education for young people is critical for improving their life chances.

Part of the challenge is to plan well and select courses that are of personal and/or academic interest. It is essential that choices are not made based on what friends are doing as this will likely result in very limited outcomes being achieved.

Although we do our very best to provide students with the personal interest subjects they select, this depends very much on numbers. We make every possible effort to provide as broad a range of subjects as possible.

During the process of course selection, students and parents should actively seek advice from as many relevant sources as possible. Students who choose courses based on wide consultation usually experience less dissatisfaction and greater success and avoid the turmoil of course changes.

Parents, please take the time to read this guide and be actively involved in the course selection process with your child; ask questions, and speak to the teachers involved. Staff are committed to assisting you every step of the way.

Students, I wish you every success with the subjects you choose and look forward to working with you towards a very productive and rewarding year of learning in 2020 and beyond.

Maree Pinnington
Principal
GRADE 7 CURRICULUM

In 2020 at Kings Meadows High School, all Grade 7 students will undertake studies in the following subject areas:

Compulsory (full year courses):

- English/Literacy
- Health & Physical Education
- Mathematics/Numeracy
- Science
- Humanities & Social Science

Students study these subjects all year and the courses align with the Australian Curriculum:

Compulsory (half year course):

- Visual Arts  HALF YEAR
- Drama  HALF YEAR
- LOTE  (Mandarin)  HALF YEAR
- Design Technologies  HALF YEAR
- Music  HALF YEAR
- Food Technology  HALF YEAR

These subjects are aligned with the Australian Curriculum.
GRADE 7 ENRICHMENT COURSES:

All Grade 7 students will study up to 4 enrichment courses, each for approximately 10 weeks in duration. Students must select their top 6 enrichment courses (from those listed in this document) with Number 1 being their first preference etc.

It should be noted that each class in any given subject needs a minimum number in order for it to run - thus if there are insufficient numbers for a class to be considered viable, students may need to study their next preferred course.

Further information about specific subjects is available from the following Learning Area Leaders:

THE ARTS
Mrs Katie Wightman (katie.wightman@education.tas.gov.au)

TECHNOLOGIES
Mr Jake Chamberlain (jake.chamberlain@education.tas.gov.au)

ENGLISH
Ms Karen Furley (karen.furley@education.tas.gov.au)

HUMANITIES & SOCIAL SCIENCES
Mrs Emma Dobson (emma.dobson@education.tas.gov.au)

HEALTH & PHYSICAL EDUCATION
Mrs Coleen Elliott (coleen.elliott@education.tas.gov.au)

MATHEMATICS
Mrs Claire Lovitt (claire.nitschke@education.tas.gov.au)

SCIENCE
Mrs Elizabeth Wilson (elizabeth.wilson@education.tas.gov.au)

Principal
Mrs Maree Pinnington

Assistant Principal - Grade 7/8
Mrs Katie Wightman

Assistant Principal - Grade 9/10
Ms Kate Blaubaum

Grade 7 AST
To be confirmed

Grade 7 Leader
Miss Lillian Males
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**KMHS COURSE SELECTION HELPLINE**

If you have any questions or need further clarification regarding information in this booklet please email either:

- katie.wightman@education.tas.gov.au
- kate.blbaum@education.tas.gov.au

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## THE ARTS LEARNING AREA

| The Arts Learning Area | Choir | Students will learn and rehearse a variety of new songs as a group, with the intention to perform for an audience. This course will provide them with the opportunity to develop a range of vocal and performance skills such as how to sing in a group, harmonise, project their voice and perform successfully to an audience. There will also be possibilities for solo singing.  
Australian Curriculum Links: The Arts - Music  
- Experiment with texture and timbre in sound sources using aural skills (ACAMUM092).  
- Practise and rehearse a variety of music, including Australian music to develop technical and expressive skills (ACAMUM094).  
- Perform and present a range of music, using techniques and expression appropriate to style (ACAMUM096).  
- Identify and connect specific features and purposes of music from different eras to explore viewpoints and enrich their music making, starting with Australian music including music of Aboriginal and Torres Strait Islander Peoples (ACAMUR098).  
General Capabilities:  
- Literacy  
- Numeracy  
- Information and Communication Technology (ICT) Capability  
- Ethical Understanding |
| Dance for Fun and Fitness | In Dance for Fun and Fitness, students will be given the opportunity to learn about safe warm-up practices and fitness techniques. Through working in groups on weekly tasks, students will be exposed to elements of choreography and will be required to learn, rehearse and present dance works.  
Australian Curriculum Links: The Arts - Dance  
- Combine elements of dance and improvise by making literal movements into abstract movements (ACADAM013).  
- Practice and refine technical skills in style-specific techniques (ACADAM015).  
- Structure dances using choreographic devices and form (ACADAM016).  
- Rehearse and perform focusing on expressive skills appropriate to style and/or choreographic intent (ACADAM017).  
General Capabilities:  
- Personal and Social Capability  
- Ethical Understanding |
| Film Making - Introduction | This course will offer an introduction to the fundamental elements of film making. It is essential that students complete this course before going on to the more advanced course. They could potentially undertake the two courses in one year, but this is not essential and will depend on student numbers.  
Through this course, students will complete short tasks each week that teach them how to use film making equipment and how to approach each element of the film making process.  
These include:  
- Recording audio for film  
- Using a video camera for effect  
- Developing a story for film  
- Storyboarding and creating shot lists |
<table>
<thead>
<tr>
<th>The Arts Learning Area</th>
<th>Film Making – Next Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Editing and post-production</strong></td>
<td></td>
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<tr>
<td>Australian Curriculum Links: The Arts - Media Arts</td>
<td></td>
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<tr>
<td>• Develop and refine media production skills to shape images, sounds and text for a specific purpose and meaning (ACAMAM068).</td>
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<tr>
<td><strong>General Capabilities:</strong></td>
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<tr>
<td>• Literacy</td>
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<td>• Information and Communication Technology (ICT)</td>
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<td>• Personal and Social</td>
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<tr>
<td>This course will allow students to combine their technical skills and understandings about film making in order to develop their own short film. Students should have completed the introductory course first, in order to ensure they have the necessary knowledge to support their project.</td>
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<tr>
<td>There will be an emphasis on displaying group responsibility and the ethics involved in film making. Students that are wishing to extend their skills may also have the opportunity to enter a completed film into a competition such as My State Film Festival.</td>
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<tr>
<td>Australian Curriculum Links: The Arts - Media Arts</td>
<td></td>
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<tr>
<td>• Experiment with the organisation of ideas to structure stories in images, sounds and text (ACAMAM066).</td>
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<tr>
<td>• Develop and refine media production skills to shape images, sounds and text for a specific purpose and meaning (ACAMAM068).</td>
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<tr>
<td>• Plan, structure and design media artworks that engage audiences (ACAMAM069).</td>
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<td><strong>General Capabilities:</strong></td>
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<td>• Personal and Social</td>
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<table>
<thead>
<tr>
<th>The Arts Learning Area</th>
<th>Photography</th>
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<tbody>
<tr>
<td><strong>Exploring ideas (ACAVAM118)</strong></td>
<td></td>
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<tr>
<td><strong>Manipulating and applying the elements/concepts with intent (ACAVAM119).</strong></td>
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<tr>
<td><strong>Developing and refining understanding of skills and techniques (ACAVAM120).</strong></td>
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</tr>
<tr>
<td><strong>Structuring and organising ideas into form (ACAVAM121).</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sharing artworks through presentation or display (ACAVAM122).</strong></td>
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<tr>
<td><strong>General Capabilities:</strong></td>
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<td>• Critical and Creative Thinking</td>
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<td>• Personal and Social</td>
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<tr>
<td>In Junior Photography, students will be introduced to the fundamental concepts of digital photography and apply their knowledge through practical activities designed for beginning to intermediate participants: photographic composition, basic DSLR camera operation, photo production and how to upload and save image files. There will be an expectation to experiment with light, angles, framing and placement of subject, as well as consider the best way to capture portrait, action, macro and landscape images. Students will be challenged to share resources and demonstrate responsibility in their approach to learning.</td>
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<tr>
<td>Australian Curriculum Links: The Arts - Visual Arts</td>
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<tr>
<td><strong>Exploring ideas (ACAVAM118)</strong></td>
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<tr>
<td><strong>Manipulating and applying the elements/concepts with intent (ACAVAM119).</strong></td>
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<tr>
<td><strong>Developing and refining understanding of skills and techniques (ACAVAM120).</strong></td>
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</tr>
<tr>
<td><strong>Structuring and organising ideas into form (ACAVAM121).</strong></td>
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<td>• Critical and Creative Thinking</td>
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<td>• Personal and Social</td>
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</tbody>
</table>
| The Arts Learning Area | Public Speaking | In this course, students will have opportunity to develop their confidence in speaking successfully in front of others. They will practise the skills involved in public speaking through informal, classroom-based activities designed to put them at ease, as well as more structured tasks such as writing and delivering a speech for a specific purpose and audience. There will be an emphasis on constructing a coherent argument and justifying an opinion, as well as the importance of listening to and respecting the viewpoints of others. Australian Curriculum Links: The Arts - English
- Create texts that draw upon text structures and language features of other texts for particular purposes and effects (ACELT1632)
- Experiment with language features to create new texts (ACELT1768)
Australian Curriculum Links: The Arts - Drama
- Develop and refine expressive skills in voice and movement to communicate ideas (ACADRM043)
General Capabilities
- Literacy
- Personal and Social Capability
- Critical and Creative Thinking
- Ethical Understanding |
| The Arts Learning Area | Script Writing | This course is tailored to students who enjoy creative writing and like the thought of seeing their stories ‘come to life’. Students will explore the essential elements of script-writing for both stage and screen, before taking creative control and writing an original script that will be read aloud by their classmates. Who knows, they may even see their work performed on stage or developed into a film! Australian Curriculum: English
- Create texts that draw upon text structures and language features of other texts for particular purposes and effects (ACELT1632)
- Experiment with language features to create new texts (ACELT1768)
Australian Curriculum – The Arts: Drama
- Combine the elements of drama to explore and develop issues, ideas and themes (ACADRM040)
General Capabilities
- Literacy
- Critical and Creative Thinking |
| The Arts Learning Area | Visual Arts | In Visual Arts, students will have the opportunity to improve their drawing skills and learn to follow the art inquiry process to develop their ideas in response to a concept. Students will be challenged to experiment with a range of materials and reflect on their preference to draw and use mixed media.
Australian Curriculum Links: The Arts - Visual Arts
- Exploring ideas (ACAVAM118)
- Manipulating and applying the elements/concepts with intent (ACAVAM119).
- Developing and refining understanding of skills and techniques (ACAVAM120).
- Structuring and organising ideas into form (ACAVAM121). |
### English Learning Area

**Reader’s Cafe**

In Reader’s Café, students will have the opportunity to ‘drink’ in different characters and perspectives while enjoying amazing books and sipping hot beverages with peers. Students will be given choice with the reading material and negotiate assessment tasks. They will also be encouraged to pursue topics of interest to the group.

**Australian Curriculum Links: English:**
- Share, reflect on, clarify and evaluate opinions and arguments about aspects of literary texts (ACELT1627).
- Understand and explain how combinations of words and images in texts are used to represent particular groups in society, and how texts position readers in relation to those groups (ACELT1628).
- Recognise and explain differing viewpoints about the world, cultures, individual people and concerns represented in texts (ACELT1807).

**General Capabilities:**
- Literacy
- Critical and Creative Thinking
- Personal and Social

### Digital Technologies Learning Area

**Projects in Computing**

In Projects in Computing, students will have the opportunity to develop new skills as well as extend already acquired skills and knowledge in this area. Students will study graphic design, 3D modelling, coding and website design. Throughout this course students will continue the development of basic computing skills such as typing and file management, including downloading, renaming and uploading a range of document types.

**Australian Curriculum Links: Technologies – Digital Technologies**
- Acquire data from a range of sources and evaluate authenticity, accuracy and timeliness (ACTDIP025).
- Plan and manage projects that create and communicate ideas and information collaboratively online, taking safety and social contexts into account (ACTDIP032).
- Design the user experience of a digital system, generating, evaluating and communicating alternative designs (ACTDIP028).

**General Capabilities:**
- Literacy
- Numeracy
- Information and Communication Technology (ICT)
- Critical and Creative Thinking

### Health & Physical Education Learning Area

**Introduction to Sports Science**

This course is designed to broaden students’ knowledge of three key areas of Sport Science: exercise physiology, exercise psychology and skill acquisition. Students will participate in practical experiments designed to investigate topics such as heart rate and exercise, angle of release and reaction time. They will expand their skills and knowledge through theoretical scientific reports and apply their understanding of the factors which influence sporting performance.
<table>
<thead>
<tr>
<th>Health &amp; Physical Education Learning Area</th>
<th>Sport Education</th>
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<tbody>
<tr>
<td></td>
<td>In Sport Education, students will participate in various sporting rosters. They will have the opportunity to develop the skills required to manage and coordinate competitions, particularly those key concepts involved in developing and maintaining a sports ladder and roster. Students will learn to work in team situations and develop leadership and physical skills. Fairness and respect for opponents and the integrity of the games will be explored.</td>
</tr>
</tbody>
</table>

**Australian Curriculum Links: Health and Physical Education**
- Participate in physical activities that develop health-related and skill-related fitness components and create and monitor personal fitness plans (ACPMP083).
- Evaluate and justify reasons for decisions and choices of action when solving movement challenges (ACPMP087).

**General Capabilities:**
- Literacy
- Numeracy
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

<table>
<thead>
<tr>
<th>Health &amp; Physical Education Learning Area</th>
<th>Summer Sport Girls Football</th>
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<tbody>
<tr>
<td></td>
<td>In Junior Girls Football, students have opportunity to apply social skills to establish and maintain respectful relationships, whilst promoting fair play and inclusivity. Individually, students will develop their specialised movement skills by refining control and accuracy, whilst improving fitness outcomes. Together, they will work on decision-making and problem-solving to implement game plans, working towards collaboratively succeeding as a team.</td>
</tr>
</tbody>
</table>

**Australian Curriculum Links: Health and Physical Education**
- Use feedback to improve body control and coordination when performing specialised movement skills in a variety of situations (ACPMP080).
- Evaluate and justify reasons for decisions and choices of action when solving movement challenges (ACPMP087).
- Practise, apply and transfer movement concepts and strategies with and without equipment (ACPMP082).

**General Capabilities:**
- Literacy
- Numeracy
- Information and Communication Technology (ICT)
- Ethical Understanding

**This course requires a commitment to enrol for two terms. It runs in Terms 1 and 4.**
Evaluate and justify reasons for decisions and choices of action when solving movement challenges (ACPMP087).

General Capabilities:
- Literacy
- Numeracy
- Critical and Creative Thinking

Health & Physical Education Learning Area

<table>
<thead>
<tr>
<th>Winter Sport</th>
<th>Football</th>
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<tbody>
<tr>
<td>In Junior Football, students have opportunity to apply social skills to establish and maintain respectful relationships, whilst promoting fair play and inclusivity. Individually, students will develop their specialised movement skills by refining control and accuracy, whilst improving fitness outcomes. Together, they will work on decision-making and problem-solving to implement game plans, working towards collaboratively succeeding as a team.</td>
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This course requires a commitment to enrol for two terms. It runs in Terms 2 and 3.

Australian Curriculum Links: Health and Physical Education
- Use feedback to improve body control and coordination when performing specialised movement skills in a variety of situations (ACPMP080).
- Practise, apply and transfer movement concepts and strategies with and without equipment (ACPMP082).
- Participate in physical activities that develop health-related and skill-related fitness components and create and monitor personal fitness plans (ACPMP083).
- Demonstrate and explain how the elements of effort, space, time, objects and people can enhance movement sequences (ACPMP084).
- Practise and apply personal and social skills when undertaking a range of roles in physical activities (ACPMP086).
- Evaluate and justify reasons for decisions and choices of action when solving movement challenges (ACPMP087).

General Capabilities:
- Literacy
- Numeracy
- Critical and Creative Thinking

Health & Physical Education Learning Area

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<thead>
<tr>
<th>Winter Sport</th>
<th>Netball</th>
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<tr>
<td>In Junior Netball, students will have the opportunity to apply social skills to establish and maintain respectful relationships, whilst promoting fair play and inclusivity. Individually, students will develop their specialised movement skills by refining control and accuracy, whilst improving fitness outcomes. Together, they will work on decision-making and problem-solving to implement game plans, working towards collaboratively succeeding as a team.</td>
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This course requires a commitment to enrol for two terms. It runs in Terms 2 and 3.

Australian Curriculum Links: Health and Physical Education
- Use feedback to improve body control and coordination when performing specialised movement skills in a variety of situations (ACPMP080).
- Practise, apply and transfer movement concepts and strategies with and without equipment (ACPMP082).
- Participate in physical activities that develop health-related and skill-related fitness components and create and monitor personal fitness plans (ACPMP083).
Health & Physical Education Learning Area

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<tr>
<th>Winter Sport Soccer</th>
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In Junior Soccer, students have opportunity to apply social skills to establish and maintain respectful relationships, whilst promoting fair play and inclusivity. Individually, students will develop their specialised movement skills by refining control and accuracy, whilst improving fitness outcomes. Together, they will work on decision-making and problem-solving to implement game plans, working towards collaboratively succeeding as a team.

This course requires a commitment to enrol for two terms. It runs in Terms 2 and 3.

Australian Curriculum Links: Health and Physical Education
- Use feedback to improve body control and coordination when performing specialised movement skills in a variety of situations (ACPMP080).
- Practise, apply and transfer movement concepts and strategies with and without equipment (ACPMP082).
- Participate in physical activities that develop health-related and skill-related fitness components and create and monitor personal fitness plans (ACPMP083).
- Demonstrate and explain how the elements of effort, space, time, objects and people can enhance movement sequences (ACPMP084).
- Practise and apply personal and social skills when undertaking a range of roles in physical activities (ACPMP086).
- Evaluate and justify reasons for decisions and choices of action when solving movement challenges (ACPMP087).

General Capabilities:
- Literacy
- Numeracy
- Critical and Creative Thinking
- Personal and Social Capability

MATHEMATICS LEARNING AREA

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<thead>
<tr>
<th>Mathematics Learning Area</th>
<th>Survival Maths</th>
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Survival Maths is a fantastic course for students who are motivated and would benefit from additional time and support to refine their maths skills. Students will be provided with a program tailored to their individual learning needs within this curriculum area. This course allows students to consolidate the learning they are doing in their regular maths class by giving them the time to practise concepts and receive additional support. ‘Practise makes perfect’.

Australian Curriculum Links: Mathematics
- Number and Algebra
- Measurement and Geometry
- Statistics and Probability
### Mathematics Learning Area

**X-Math**

X-Math will give students who are interested in learning more about mathematics the opportunity for enrichment and extension. Students will take part in practical activities and investigations and learn appropriate mathematical language and terminology, enabling them to present clear, logical, written solutions to problems. This course provides opportunities for students to refine their mathematical skills and creates a pathway for further extension in Years 9 and 10.

**Australian Curriculum Links: Mathematics**
- Extend and apply the distributive law to the expansion of algebraic expressions (ACMNA190)
- Factorise algebraic expressions by identifying numerical factors (ACMNA191)
- Simplify algebraic expressions involving the four operations (ACMNA192)
- Solve linear equations using algebraic and graphical techniques. Verify solutions by substitution (ACMNA194)
- Apply the distributive law to the expansion of algebraic expressions, including binomials, and collect like terms where appropriate (ACMNA213)
- Extend and apply the index laws to variables, using positive integer indices and the zero index (ACMNA212)

### Science Learning Area

**Bubbles and Bangs**

Bubbles and Bangs is a hands-on course that will focus on the more practical side of the Science learning area, with experiments and activities occurring each lesson. There will be an emphasis on developing accuracy and skills for scientific investigation, as well as problem-solving, design and construction and the opportunity to undertake various challenges related to their experiments.

Students will develop skills in:
- Laboratory safety
- Experimental design
- Experimental precision
- Following plans
- Collaborating with others
- Problem-solving

**Australian Curriculum Links: Science**
- Mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques (ACSSU113).
- Chemical change involves substances reacting to form new substances (ACSSU225).
- Energy appears in different forms, including movement (kinetic energy), heat and potential energy, and energy transformations and transfers cause change within systems (ACSSU155).
- Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed (ACSS140).

**General Capabilities:**
- Literacy
- Numeracy
- Critical and Creative Thinking
Robotics

Robotics is a highly practical subject in which students will explore the programming and construction of Lego Mindstorm robots. There will be a focus on following plans, problem-solving and the process of design and construction, with students having the opportunity to undertake various challenges related to the movement and control of their robots. Collaborative work skills such as attentive listening and conflict resolution will be crucial.

Australian Curriculum Links: Science

- Energy appears in different forms, including movement (kinetic energy), heat and potential energy, and energy transformations and transfers cause change within systems (ACSSU155).
- Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures (ACSHE226).
- Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE135).
- People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE136).

General Capabilities:

- Literacy
- Numeracy
- Information and Communication Technology (ICT) Capability
- Ethical Understanding

STEM Challenges

Students will be given the opportunity to deepen their understanding of existing and new STEM topics, undertaking design and building challenges to enhance their ability to think creatively. The use of ICT will be significant for the collection and presentation of data, along with building skills in coding and electronics. Students will extend their skills and understanding so that they can be competitive in their chosen area of focus.

Some examples of the diverse range of challenges on offer are:

- F1 in Schools program – design and build a model F1 race car to compete in the state F1 competition
- 4 x 4 Challenge – design and build a radio-controlled four-wheel drive vehicle to compete in the state 4x4 competition
- University Science challenges
- Robotics competitions
- Electronics, Programming and Circuits
- Engineering Challenges

Australian Curriculum Links: Science

- Energy appears in different forms, including movement (kinetic energy), heat and potential energy, and energy transformations and transfers cause change within systems (ACSSU155).
- Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures (ACSHE226).
- Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE135).
- People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE136).

General Capabilities:

- Literacy
<table>
<thead>
<tr>
<th>Technologies Learning Area</th>
<th>Celebratory Cooking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In this course</strong> students will use a calendar of events to design and plan recipes based on Australian celebrations. Examples of celebrations that could feature are Australia Day, Easter, ANZAC Day, AFL Grand Final, Christmas and the Melbourne Cup.</td>
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<tr>
<td>Students will learn:</td>
<td></td>
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<tr>
<td>• How to plan for a particular event or occasion</td>
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<tr>
<td>• Food presentation techniques</td>
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<tr>
<td>• How to host and lead a fundraising event (e.g. Biggest Morning tea)</td>
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<tr>
<td>Australian Curriculum Links: Technologies – Design and Technologies</td>
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<tr>
<td>• Analyse how characteristics and properties of food determine preparation techniques and presentation when designing solutions for healthy eating (ACTDEK033).</td>
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<tr>
<td>• Analyse ways to produce designed solutions through selecting and combining characteristics and properties of materials, systems, components, tools and equipment (ACTDEK034).</td>
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<tr>
<td>General Capabilities:</td>
<td></td>
</tr>
<tr>
<td>• Literacy</td>
<td></td>
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<tr>
<td>• Numeracy</td>
<td></td>
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<tr>
<td>• Information and Communication Technology (ICT) Capability</td>
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<tr>
<td>• Ethical Understanding</td>
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<thead>
<tr>
<th>Technologies Learning Area</th>
<th>Wood and Metal Projects</th>
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<tbody>
<tr>
<td><strong>This course will provide students with opportunities to work with a variety of different materials. A focus will be on cutting, shaping and joining techniques, whilst learning key aspects associated with safe work practices.</strong></td>
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<tr>
<td>Australian Curriculum Links: Technologies – Design and Technologies</td>
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<tr>
<td>• Select and justify choices of materials, components, tools, equipment and techniques to effectively and safely make designed solutions (ACTDEP037).</td>
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<tr>
<td>• Use project management processes when working individually and collaboratively to coordinate production of designed solutions (ACTDEP039).</td>
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<tr>
<td>General Capabilities:</td>
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<tr>
<td>• Critical and Creative thinking</td>
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<tr>
<td>• Ethical Understanding</td>
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<tr>
<td>• Personal and Social Capability</td>
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<td>• Literacy</td>
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<tr>
<td>• Numeracy</td>
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<tr>
<th>Technologies Learning Area</th>
<th>Magic Science of Cooking</th>
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<tr>
<td><strong>In this course, students will have the opportunity to undertake, observe and evaluate some common chemical reactions observed in cookery. In addition, they will look at mechanical reactions that change the form of particular ingredients. These reactions are what make the science of cooking happen!</strong></td>
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<tr>
<td>Students will understand:</td>
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<td>• that cooking is based on chemistry (e.g acids and bases to make sherbet)</td>
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<td>• various mechanical reactions that transform ingredients (cream into butter, egg white into meringue)</td>
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<td>• that some ingredients are used for food preservation (e.g sugar, vinegar, salt)</td>
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<tr>
<td>Australian Curriculum Links: Technologies – Design and Technologies</td>
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</tbody>
</table>
- Investigate and make judgments on the principles of food safety and the ethical and sustainable production and marketing of food and fibre (ACTDEK044).
- Work flexibly to effectively and safely test, select, justify and use appropriate technologies and processes to make designed solutions (ACTDEP050).

General Capabilities:
- Literacy
- Numeracy
- Information and Communication Technology (ICT)
- Ethical Understanding

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<tr>
<th>Technologies Learning Area</th>
<th>Race It!</th>
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| Students will design, make and race a CO₂ canister-propelled car, made from wood, plastic and steel. They will also manufacture and make self-propelled watercraft from a variety of materials and there will be additional design challenges for teams and individuals. Students will learn about design limitations, simple movement systems, working with wood, metal and plastic and the use of various hand and mechanical tools, including lathes, drills, sanders and scroll saws.

Australian Curriculum Links: Technologies - Design and Technologies
- Analyse ways to produce designed solutions through selecting and combining materials, systems, components, tools and equipment (ACTDEK034).
- Effectively and safely use a broad range of materials, components, tools, equipment and techniques to make designed solutions (ACTDEP037).

General Capabilities:
- Literacy
- Numeracy
- Information and Communication Technology (ICT)
- Ethical Understanding

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<tr>
<th>Technologies Learning Area</th>
<th>RoboWars</th>
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| RoboWars is a robot combat competition that is centered on the sport of robot combat. It involves teams that operate their own constructed remote controlled robots to fight against each other, whilst also avoiding arena hazards. Students will use a range of technology processes which including digital fabrication and manufacturing to prepare their robots for battle.

Students will learn:
- Basic programming using ‘Blockly’
- How to plan and collaborate for strategy

Content descriptors
- Analyse how motion, force and energy are used to manipulate and control electromechanical systems when designing simple, engineered solutions (ACTDEK031)
- Use project management processes when working individually and collaboratively to coordinate production of designed solutions (ACTDEP039)

General Capabilities:
- Literacy
- Numeracy
- Critical and Creative Thinking
- Personal and Social Capability
- Information and Communication Technology (ICT)
| Technologies Learning Area | Snack Size | Students will be given the opportunity to cook a variety of dishes that are both simple and nutritious. Emphasis will be placed on the presentation of the finished product. Students will be exposed to a variety of methods and techniques using a range of ingredients that are commonly found in most kitchens and supermarkets.  
Australian Curriculum Links: Technologies – Design and Technologies
- Analyse how characteristics and properties of food determine preparation techniques and presentation when designing solutions for healthy eating (ACTDEK033).
- Analyse ways to produce designed solutions through selecting and combining characteristics and properties of materials, systems, components, tools and equipment (ACTDEK034).

General Capabilities:
- Literacy
- Critical and creative thinking
- Numeracy
- Personal and Social Capability |
| Technologies Learning Area | Wooden Toy Making | This course will provide students with the opportunity to learn a range of skills associated with cutting, shaping and joining various pieces of timber. Students will make and personalise a variety of wooden toys. Possibilities include cars, boats, mobiles, fire engines, puppets, games and even trucks.  
Australian Curriculum Links: Technologies - Design and Technologies
- Analyse ways to produce designed solutions through selecting and combining materials, systems, components, tools and equipment (ACTDEK034).
- Effectively and safely use a broad range of materials, components, tools, equipment and techniques to make designed solutions (ACTDEP037).

General Capabilities:
- Literacy
- Numeracy
- Information and Communication Technology (ICT)
- Ethical Understanding |