

# Year 10



# Overview



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*\* This handbook is intended as a guide only. Full curriculum information is available to students and parents on St Michael's online teaching and learning platform, SchoL.*

This handbook is designed to provide students and parents with important information related to all subjects and studies in Year 10, 2019 at St Michael's Grammar School. A detailed account of the subjects and studies in Year 11 and 12 is provided in a separate curriculum handbook.

In Years 7 and 8, the curriculum reflects the belief that students in early secondary schooling benefit from participating in a broad range of core learning opportunities. As students move into Year 9, the curriculum provides more opportunities for choice via options offered within core areas of study and the elective program. In doing so, we encourage students to take an increasing level of responsibility for their program and to try the subjects that they may wish to take in Year 10 and beyond. Educational research suggests that students, particularly those in their middle years of schooling, become more engaged in their studies if they are given greater control of what and how they learn. All students complete core studies and the selection of options within the elective program does not preclude students from taking alternative electives in the following year. Each of the options is designed to be a stand-alone unit of work, and hence a Semester 1 option is not a prerequisite for a Semester 2 option. The exceptions to this are the Language options which must be undertaken at Year 9 if they are to be selected at Year 10.

In constructing the program in any given year, we make every effort to meet the subject selection preferences of the maximum number of students. However, some options may not be offered due to insufficient demand and individual students may not always be given their first preference options.

St Michael's is committed to preparing students to be independent learners and responsible citizens. We endeavour to provide an invigorating learning environment in which students acquire knowledge and skills which are critical in them becoming lifelong learners. Students who succeed tend to be those who have good organisational skills, lead a balanced lifestyle and who have a sense of optimism about their future. The challenge for parents and teachers is to provide them with just the right level of support and advice that communicates both our confidence and our trust in them.

**Tim Dorning**

Associate Head (Teaching and Learning)



# Year 10 Course Structure

## Year 10 Core Subjects:

All students in Year 10 take the following core subjects: English, Health and Physical Education, Humanities, Mathematics, Outdoor Education, and Science.

## Year 10 Electives:

Students choose four semester electives. These can be taken in Semester 1 and/or Semester 2. With the exception of Languages, students can take any Semester 2 electives without having done the Semester 1 unit. Some electives integrate an aspect of the student's co-curricular activities within the academic program.

## Immersion Projects:

All Year 10 students will be involved in an Immersion Project during the last two weeks of Term 2. These projects enable students to pursue an uninterrupted study in a chosen area for a prolonged period of time. Immersion Projects complement the School's dedication to encouraging the "quiet mind", by enabling students to sustain focus on a particular aspect of the curriculum for a prolonged period of time.

There is a wide range of Immersion Projects available to students, all of which follow the same fundamental principles.

- Exploration of an area in-depth, single or multi-disciplinary
- Preparation over the semester outside class time leading into a two-week intensive for completion (some Immersion Projects will run over three weeks, extending into the mid-year holiday)
- Independent learning, supported by specialist teachers related to their area of study
- The ability to focus entirely on the outcomes of the project without the need to complete other work

Immersion Projects will be structured as follows:

Each course runs for Semester 1, Year 10

- Out-of-class preparatory activities will take place in the lead-up to the final two weeks of Term 2 which will be set aside for all Year 10 students to complete the requirements of their Immersion Project
- The regular Year 10 program is suspended for this two-week period
- Students may only undertake one Immersion Project
- Formal assessment will be carried out in a variety of ways depending on the nature of the project

Choice of Immersion Project will be made independently of subject choice, with one exception; students choosing the Great Barrier Reef project must select Enhanced Biology Unit 1 in Semester 1 and Unit 2 Biology in Semester 2. Entrance to this course is subject to students meeting academic selection criteria.

Students who choose to participate in the European Choir Tour or the Italian Trip, will be granted exemption from participation in the Immersion program.



# Year 10 Core Subjects

## English

### Focus questions: How have others represented our world?

- Discuss and critically analyse texts, both orally and verbally
- Speak, listen, view and write with enjoyment, purpose, effect and confidence in a wide range of contexts
- Recognise the ways in which language varies according to context, purpose, audience and content and the capacity to apply this knowledge
- Identify the linguistic patterns used to construct different texts, and the capacity to apply this knowledge, especially in writing
- Relate knowledge gained from wide reading about aspects of society, culture and personal experience
- Recognise that textual interpretation and understanding may vary according to social, cultural and personal differences - students begin to develop reasoned argument based on understanding and meaning

### Terms 1-3:

**English:** All students are expected to cover this course content.

Key objectives:

- Contextualise a range of text types
- Learn to reflect, evaluate, analyse, and interpret texts
- Develop an understanding of text structures and organisation
- Plan, rehearse and deliver presentations in oral and written modes
- Understand how language can vary and change over time

Texts produced:

- Essay, creative response, oral presentation, written analysis, multi-modal presentation

### Term 4 - VCE Pathways:

Students complete the English that aligns with their VCE pathway.

### English

Students will write a creative short story to improve their ability to:

- Develop creative responses to texts
- Make choices about structure, conventions, and language to develop voice and style
- Reflect on the creative process
- Use language in a creative and powerful way
- Revise for proofreading errors

Key objectives:

- Contextualise a range of texts
- Learn to reflect, evaluate, analyse, compare and interpret texts
- Develop an understanding of text structures and organisation
- Plan, rehearse and deliver presentations in oral and written modes

Understand how language can vary and change over time

Texts produced:

- Essay, oral presentation, multi-modal presentation, persuasive and analytical writing

## English Language

Students will be introduced to how elements of language influence our daily interactions, in particular formal and informal language, slang and dialects.

Key objectives:

- Develop the research skills to explore the social, cultural, political and historical factors that contribute to language variation and change
- Interpret and evaluate how people, cultures, places, events, objects and concepts are represented in spoken and written forms
- Compare and contrast information within and between texts
- Draw comparisons across various research findings
- Write and speak analytically, informatively, persuasively and creatively

Texts produced:

- Metalanguage test, research task, multi-modal presentation and an essay

## Literature

Students will complete an introduction to Shakespeare's sonnets.

Key objectives:

- Identify social, cultural, political and historical factors that contribute to a literary movement or culture
- Compare and evaluate a range of representations of individuals and groups in different historical, social and cultural contexts
- Present observations, evaluations and responses in multi-modal forms
- Share, compare, contrast and debate various findings
- Write and speak in a range of modes: analytical, persuasive, creative, and informative

Texts produced:

- Investigative research, multi-modal presentation, creative writing and an essay

# Year 10 Core Subjects

## Health and Physical Education

Health and Physical Education focuses on students enhancing their own and others' health, safety, wellbeing and physical activity participation in varied and changing contexts. Health and Physical Education offers students an experiential curriculum that is contemporary, relevant, challenging, enjoyable and physically active.

In Health and Physical Education, students develop the knowledge, understanding and skills to strengthen their sense of self, and build and manage satisfying relationships. The curriculum helps them to be resilient, and to make decisions and take actions to promote their health, safety and physical activity participation. As students mature, they develop and use critical inquiry skills to research and analyse the knowledge of the field and to understand the influences on their own and others' health, safety and wellbeing. They also learn to use resources for the benefit of themselves and for the communities with which they identify with and to which they belong.

Integral to Health and Physical Education is the acquisition of movement skills, concepts and strategies to enable students to confidently, competently and creatively participate in a range of physical activities. As a foundation for lifelong physical activity participation and enhanced performance, students develop proficiency in movement skills, physical activities and movement concepts and acquire an understanding of the science behind how the body moves. In doing so, they develop an appreciation of the significance of physical activity, outdoor recreation and sport both in Australian society and globally.

Movement is a powerful medium for learning, through which students can acquire, practise and refine personal, behavioural, social and cognitive skills. The Health and Physical Education curriculum addresses how contextual factors influence the health, safety, wellbeing, and physical activity patterns of individuals, groups and communities. It provides opportunities for students to develop skills, self-efficacy and dispositions to advocate for, and positively influence, their own and others' health and wellbeing.

Healthy, active living includes promoting physical fitness, healthy body weight, psychological wellbeing, cognitive capabilities and learning. A healthy, active population improves productivity and personal satisfaction, promotes pro-social behaviour and reduces the occurrence of chronic disease. Health and Physical Education teaches students how to enhance their health, safety and wellbeing and contribute to building healthy, safe and active communities.

Health and Physical Education aims to develop the knowledge, understanding and skills to enable students to:

- Access, evaluate and synthesise information to take positive action to protect, enhance and advocate for their own and others' health, wellbeing, safety and physical activity participation across their lifespan
- Develop and use personal, behavioural, social and cognitive skills and strategies to promote a sense of personal identity and wellbeing and to build and manage respectful relationships
- Acquire, apply and evaluate movement skills, concepts and strategies to respond confidently, competently and creatively in a variety of physical activity contexts and settings
- Engage in and enjoy regular movement-based learning experiences and understand and appreciate their significance to personal, social, cultural, environmental and health practices and outcomes
- Analyse how varied and changing personal and contextual factors shape understanding of, and opportunities for, health and physical activity locally, regionally and globally.

The Health and Physical Education curriculum at Year 10 plays a significant role in building the knowledge, skills and understanding that apply to a range of health, wellbeing, safety and movement contexts, including:

- Alcohol and other drugs
- Food and nutrition
- Health benefits of physical activity
- Mental health and wellbeing
- Relationships and sexuality
- Safety
- Active play and minor games
- Fundamental movement skills
- Games and sports
- Swimming and water safety
- Challenge Activities (diving, fencing, taekwondo)
- Lifelong physical activities (yoga, spin classes, aerobics)

# Humanities

Year 10 Humanities challenges student understanding and commitment to active 21st Century citizenship in a rapidly changing environmental, technological, social and economic global world. Students explore how our rights and responsibilities as citizens were shaped by the political, social, cultural and environmental challenges of the 20th Century and evaluate how we respond to these challenges in the 21st Century.

Students compare and evaluate the challenges of sustainability and methods of management in both Australia and around the world. Students analyse how human wellbeing is affected by the economy and the standard of living by investigating changes in the work environment and risks to consumer choice. Students study threats and challenges of economic and political inequality and human rights, and explore options of how humanity can understand, respond and manage these challenges for a better global wellbeing. Finally, students examine the significant historical events with an emphasis on Australia in its global context (1918 to the present). Students evaluate how Australia was transformed as a result of the impacts of World War 2, the emerging global civil rights movement and the migrant experiences in the economics of human wellbeing and environmental movements. Students demonstrate their ability to use historical and geographic skills to plan and develop the parameters surrounding an in-depth humanities investigation, interpreting and reasoning with a range of reliable sources and data gathered to provide a range of perspectives and inform potential decisions. They will propose and justify reasoned arguments for alternative solutions to achieve desired outcomes that are creative and imaginative.

The main objectives of the Humanities curriculum are to develop in students:

- An appreciation of the economic, political, social and environmental global context in which we live and interact with the community in a meaningful and purposeful way
- The understanding of, and engagement with, the strategies to analyse problems and issues relevant to the economic and business activity in the economy
- The ability to explain how Australia maintains a civil society which recognises its responsibilities within Australia and internationally
- The ability to think and apply the discipline based understanding concepts of Geography, History, Economics and Civics and Citizenship

- The appreciation of the skills and knowledge necessary to approach VCE with confidence and capacity.

The topics covered in the course include:

21st Century Citizenship, History, Geography, and Economics

## Semester 1: Challenges to our rights and responsibilities in the 21st Century

- How were our rights and responsibilities shaped in the 20th Century?
- What are the causes and consequences of World War 2?
- To what extent did Indigenous Australians achieve rights and freedoms (1945-present)?

## Semester 2: Achieving our rights and upholding our responsibilities in the 21st Century

- How do we respond to challenges and manage environmental change?
- How does the Australian economy work for better human wellbeing?
- How does citizen participation in a global and interconnected world influence human wellbeing?

# Year 10 Core Subjects

## Mathematics

The purpose of Mathematics at Year 10 is to prepare students for either mathematically orientated studies, for which mathematical reasoning is a necessary adjunct, or simply to ensure students have sufficient mathematical understanding to function in an increasingly technological society. Year 10 students are guided towards studying Mathematics at one of three levels: Foundation, Mainstream, or Advanced.

Foundation Mathematics is a VCE Units 1 & 2 Study.

Mainstream Mathematics students complete the Year 10 course and work towards General Mathematics Units 1 & 2 and Further Mathematics Units 3 & 4.

Advanced Mathematics students work towards Units 1-4 Mathematical Methods CAS.

- Analyse univariate data and use this to make predictions about the data

The main topics covered in the course include:

- Number skills: percentages, fractions, decimals
- Finance, money, budgeting and taxation
- Investing money
- Measurement
- Number skills involved in the context of travel

### Year 10 Foundation Mathematics (VCE Units 1 & 2)

Foundation Mathematics provides for the continuing mathematical development of students entering VCE. Although undertaken in Year 10, it is a Unit 1 & 2 Mathematics subject and is aimed at those students who want to add to their mathematical skills but do not intend to undertake Unit 3 & 4 Mathematics.

In Foundation Mathematics there is a strong emphasis on using mathematics in more practical contexts where students can more readily draw connections between what they are studying and real-life situations. The areas of study for this subject are space, shape and design; patterns and number; handling data; and measurement and design.

The main objectives of the Foundation Mathematics course in Year 10 are for students to:

- Practise and add to their existing mathematical skills used in the context of financial mathematics: percentages, budgeting, profit and loss, taxation, calculating interest
- Improve their number skills involving fractions, decimals and percentages
- Calculate the perimeter and area of a variety of 2-D shapes, including composite shapes
- Calculate the volume of a variety of 3-D shapes
- Collect data and represent this using a frequency distribution table or spreadsheet

## Mathematics – Mainstream

These groups undertake a common course consisting of the study of the real number system, measurement, algebra, linear relationships, matrices, networks, geometry and statistics.

The main objectives of the Mainstream Mathematics course in Year 10 are for students to:

- Draw connections between the equations of relations and their graphs
- Simplify and factorise algebraic expressions
- Simplify algebraic products and quotients using index laws
- Solve problems involving linear equations and inequalities
- Determine probabilities of events, both theoretical and experimental and investigate independence
- Use various statistical measures to investigate, analyse and compare data sets and be able to draw valid conclusions from this analysis

The main topics covered in the course include:

- Linear Algebra
- Linear Functions and Graphs
- Indices
- Measurement
- Matrices
- Networks
- Probability
- Statistics

## Year 10 Mathematics Advanced

In Semester 2, students who have demonstrated superior understanding of Year 10 Mainstream Mathematics, and have qualified via an entrance examination, are eligible to commence VCE Mathematical Methods.

Mathematics NHT runs on a “Northern Hemisphere Timetable” where students begin the year of study in July and complete it in June of the following year. Ultimately, this allows students to complete VCE examinations in Mathematical Methods halfway through Year 12. For students who demonstrate an appropriate background in Year 10, this pathway enables a better spread of their VCE workload.

# Year 10 Core Subjects

## Science

In Year 10, students study either Science 1 or Science 2. Science 2 is only available to a limited number of students based upon discussions with the Head of Science and the Head of Additional Learning Needs.

### Science 1

Science is a way of asking the important questions about the natural world. The knowledge of science has been developed over centuries built upon experimentations and questioning why. The skills to undertake these investigations have also been refined over time and form the basis of the scientific method. Science has influenced the society in which we live and in turn society has also affected scientific direction.

By Year 10, students are investigating how theories such as evolution have changed over time as scientific knowledge and understanding developed. They investigate the evidence for the Big Bang. They work with the scale of the universe to conceptualise the event and they explore the tiny scale of atoms and use this knowledge to explain how elements react.

By investigating and experimenting, they discover the patterns of inheritance of particular characteristics and how the physical laws can explain motion and forces. They explore the range of chemical reactions and experiment with how the rate of the reaction can be altered.

To facilitate the transition to VCE Studies, students are taught three topics each semester, exposing them to a topic of Biology, Chemistry and Physics. With the relatively short sharp units taught by specialist teachers, the students critically analyse information; describing more complex relationships; design experimentation and examine ethics of the scientific research. They develop their science skills to the level that best supports them in further studies on Biology, Chemistry, Physics and Psychology.

In Semester 1 students study:

- Genetics
- Chemistry; Periodic Table and the Rate of Reaction
- Forces and Motion

In Semester 2 students study:

- Evolution
- Classifying Chemical Reactions
- Cosmology and the evidence of global warming

### Science 2: Essential Science

Science concepts may at times be complex, however, modern society is very much influenced by science and technology. Daily, there are reports about genetic testing and DNA analysis. New discoveries about the universe and reports on new planets being discovered are often in the news.

At the same time we are exposed in our lives to an array of chemicals from the latest shampoo or pesticide to the latest drug. How does a student make sense of this?

New claims often made of the latest product or miracle vitamin table bombard the news. How does a person test the claims? Are they real?

This Essential Science course explores the concepts of biology, physics and chemistry and should equip students to make sense of the modern world.

Students develop their science skills in evaluation of claims and how to design experiments to test the claims. This could provide them with the basic understanding of the science method, providing opportunities to develop the scientific skills to allow the student to undertake VCE Psychology.

Students who may consider VCE Biology, Chemistry or Physics should NOT choose this course.

In Semester 1 students study:

- Genetics and Biology of the Brain
- Chemistry
- Forces and Motion ( Being safe on the road)

In Semester 2 they study:

- Evolution
- Chemicals and the Rate of Reaction
- The Universe and everything

This course will only be available to a limited number of students based upon discussions with the Head of Science and the Head of Additional Learning Needs.



# Year 10 Elective Subjects

## Subject Choices

These electives can be taken in Semester 1 and/or Semester 2. With the exception of Languages, students can take any Semester 2 electives without having done the Semester 1 unit. Some electives integrate an aspect of the student's co-curricular activities within the academic program.

Language electives must be selected for both Semester 1 and Semester 2.

The following semester-long electives cannot be selected for both semesters:

- Dance
- Fashion Design and Textiles Technology
- Media
- Photography



# Dance

## Semester 1 and 2

The Year 10 Dance course is designed to provide students with opportunities to conceptualise, choreograph, perform and analyse dance works. In doing so, they develop skills in making decisions about creative ways of generating and implementing ideas. Students will view, research and critically discuss a range of contemporary and traditional examples of dance works from a range of disciplines, forms, and cultural and historical contexts. They will also learn to describe and discuss ways that their own and others' dance works communicate and challenge ideas and meaning.

The Year 10 Dance course has been designed for beginners and the established dancer. Students considering studying VCE Dance are strongly advised to complete this preparatory course.



The main objectives of the Year 10 Dance curriculum are to develop in students:

- The ability to analyse and interpret dance works from a range of cultural and historical contexts
- An appreciation of a range of dance styles and disciplines, and their accompanying stylistic, technical, expressive and aesthetic features
- The ability to realise their own, unique movement style and preferences
- An appreciation of the process of choreographing dance works including responding to stimulus
- The ability to develop their own movement vocabulary and creatively manipulate choreographic principles to effectively represent and communicate ideas
- An appreciation for and ability to employ rehearsal and performance skills
- An appreciation of the relationships and skills in linking dance and technology
- An understanding and use of dance terminology

Topics covered in this course include:

**Decades of Dance:** Students will explore the different genres of popular dance culture – from the roaring 1920's to the street dancing of the 1980's and 90's. Students' learning in this area will be enriched and extended by guest choreographers as well as their own decade inspired choreography.

**Masters of Innovation:** Students will explore the pioneers of modern and post-modern contemporary dance – from the 1960's to the present. They will learn about the radical choreographic processes, unique techniques and production elements of featured choreographers who have stimulated new thoughts and pathways in contemporary dance.

Dance can be selected in either Semester 1 or Semester 2.

# Year 10 Elective Subjects

## Design and Multimedia

In this course, students can undertake two discreet units of work: Print Media and Moving Image.

### Semester 1 - Print Media

Print Media focuses on designing, manipulating and constructing images using industry standard programs, including Adobe Photoshop. Students will learn to use the appropriate hardware, including a digital camera and scanner, and learn the elements for successful image development.

The topics covered in the course include:

- Creating a landscape image using photographic manipulation tools
- Retouch: skills in retouching photographs
- A Caricature: photographic manipulation and painting tools
- Exploring representations in the media
- Appropriation: a photographic and ICT recreation of an artist's work

### Semester 2 - Moving Image

Students create work that deal with the moving image. They develop skills in designing, scripting, editing, story boarding and the compilation of images using digital software.

The topics covered in the course include:

- An investigation into the process of generating moving image works of art
- Development of skills in digital platforms that support the moving image: Adobe Suite
- Exploration of production and story techniques in film
- Skills in acquiring digital video artworks
- Exploration of editing for moving image
- Skills in adding effects and manipulating footage

In both units the application of materials and techniques and interpretation of sources of inspiration by artists from different times and locations are also examined to support their understanding of the processes.

The main objectives of the Design and Multimedia curriculum are to develop in students:

- The ability to make and present still and animated digital art/design works which explore themes, issues and ideas
- Strong skills in the digital software
- Analytical skills in the interpretation of content, structure and aesthetic qualities of art/design works
- Skills in analysing the characteristics of art/film/design works in different cultural contexts
- The ability to structure and present works appropriate to chosen styles and forms
- Research and in-depth investigation skills into key areas of interest
- An ability to communicate ideas/feelings visually through making moving image works
- An understanding of the cross-cultural and global nature of film and media

Prerequisite information: Although it is not compulsory, it would be highly advantageous for students to have completed a Year 9 Visual Art & Design course. If not, a conversation with the Head of Visual Arts and Design is required.

# Enhanced Biology - Unit 1

## Semester 1

This course is only available in Semester 1 and only to students completing the Barrier Reef Immersion Project (which forms part of the Unit 1 Enhanced Biology course).

A student should consider taking this subject if they:

- Are interested in investigating the processes involved in sustaining life at cellular, system, species and ecosystem levels
- Are curious about how knowledge can be used by society to resolve problems and make advancements
- Enjoy practical work
- Are interested in a career path in biological sciences
- Are interested in fostering an empathy and respect for different environments
- Are interested in completing Unit 2 Biology
- Are interested in completing VCE Biology studies early, such as Biology Units 3 & 4
- Are undertaking the Barrier Reef Immersion Project
- Are interested in developing leadership and teamwork skills
- Are interested in developing a deep understanding of group dynamics

Prerequisite information: Students must achieve a B average in Year 9 Science and an overall B+ average for Year 9 Science.

## Study overview

Unit 1: How do living things stay alive?

Area of Study 1: How do organisms function?

Area of Study 2: How do living systems sustain life?

Area of Study 3: Practical investigation

The student will also complete during Semester 1:

- Leadership training
- Bronze Medallion Certificate
- Snorkel training

Part of Area of Study 1 and a major part of the Area of Study 3 will occur during the Barrier Reef Immersion Project.

# VCE Biology Unit 2

## Semester 2

A student should consider taking this subject if they:

- Have completed Unit 1 Enhanced Biology and the Barrier Reef Immersion Project
- Are interested in investigating genetics
- Are curious about how knowledge can be used by society to resolve problems and make advancements
- Enjoy practical work
- Are interested in a career path in biological sciences
- Are interested in undertaking further related studies, such as Biology Units 3 & 4

Prerequisite information: students must achieve a B+ average in Year 9 Science and an overall B average for Year 9.

## Study overview:

Unit 2: How is continuity of life maintained?

Area of Study 1: How does reproduction maintain the continuity of life?

Area of Study 2: How is inheritance explained?

Area of Study 3: Investigation of an issue

# Year 10 Elective Subjects

## Fashion Design and Textiles Technology

### Semester 1 and 2

This course is designed to develop an understanding of the principles of the design process through the study of textiles and the exploration of fashion design. Students undertake a number of design and practical outcomes that involve an understanding of fibres and fabrics, finishing processes, processes and manufacturing and CAD (computer aided design).

This course is predominantly a folio subject with practical outcomes, and will assist in developing appropriate skills and knowledge as required for Product Design and Technology.

The course will run the duration of a semester and is available in either Semester 1 or 2.

### Knowledge and Understanding

Students are taught to demonstrate application and understanding of:

- Materials and components
- Industrial and commercial processes
- Analysing products
- Designing products
- Technologies
- Sustainability
- Ethical design and manufacturing

### Key Skills

The study requires students to:

- Design creatively
- Manufacture functional products
- Apply systems and control computer-aided design/computer-aided manufacturing (CAD/CAM), digital media and new technologies (where appropriate)
- Analyse and evaluate processes and products

Students should consider the course if they are interested in fashion design and manufacturing, and being creative and innovative and working with their hands.

Students should consider the course if they are interested in fashion design and manufacturing, and being creative and innovative and working with their hands.

# Food and Technology

## Semester 1 - Food for the future

Combining a range of subject areas from Food and Technology, to Geography and International Development, this course is designed to take a worldview to food production. Focusing attention on sustainable and ethical food production, food miles, reducing waste and seasonal produce, students learn how to reduce the environmental impact of modern life.

Students also investigate and use the technology that has evolved in the food industry over the decades, and learn about how the developments have led to the introduction of new food products available on the market. Students interested in Heston Blumenthal style molecular gastronomy will enjoy this unit.

Students have the opportunity to design their own dishes and weekly practical lessons allow them to develop cooking skills.

Key focus areas:

- Hygienic & safe food production
- Ethical and sustainable food production
- The importance of waste reduction of both food and packaging
- Seasonal produce and food miles
- Learn about the importance of thinking globally and acting locally
- Visit a market and purchase ingredients to cater for an event for invited guests
- The development of technology and its impact on food production - including experimenting with molecular gastronomy
- The ability to work both independently and as a member of a team to problem-solve
- Skills to successfully analyse and evaluate outcomes in a range of environments
- Competence and confidence in cooking through practical experience

## Semester 2 - Food for entertaining

This course looks at a range of celebrations and the process behind catering for them. With a focus on the hospitality industry, throughout this course, students are taken on a practical adventure. Working with diverse ingredients and using varied preparation techniques, cooking methods and presentation techniques, students have the opportunity to create innovative food products. Foods produced use fresh ingredients to optimise quality and nutritional value. Following the design process, students plan and prepare a high tea for invited guests and immerse themselves in food presentation and food photography.

Students have the opportunity to design their own dishes and weekly practical lessons allow them to develop cooking skills.

Key focus areas:

- Hygienic and safe food production
- An understanding of the design process; including: design briefs, ordering and evaluating
- Following and creating design briefs and developing design ideas
- Food styling, presentation and food photography
- The ability to design menus, highlighting a range of celebrations
- Plan and prepare a high tea for invited guests
- The ability to work both independently and as a member of a team to problem-solve
- Skills to successfully analyse and evaluate outcomes in a range of environments
- Competence and confidence in cooking through practical experience

# Year 10 Elective Subjects

## Information Technology Applications - Web and Mobile Development

### Semester 1

IT Applications at Year 10 is designed to broaden students' thinking on current and future technologies in regard to uses and implications of use. Students examine how technologies are used and then learn how to develop similar technologies themselves.

In this study, students study the latest trends in computing technologies, from web servers to mobile devices. Students use the latest technology to create digital solutions, using a rapid prototyping methodology.

The main objectives of Year 10 IT Applications are to develop in students:

- The ability to critically think through problems and to be able to produce solutions
- An understanding of how web technologies work and how they were formed
- An ability to create digital content which use the latest technologies
- An appreciation for working with emerging technologies and using lateral thinking to investigate future uses
- The ability to perform higher order thinking skills and articulate concepts in verbal and visual forms
- An ability to problem solve and troubleshoot using known techniques

The topics covered in the course include:

#### Web Development

- The Internet, design and structure
- Web design
- Web development in HTML5, CSS3 and JavaScript
- Mobile design (Responsive vs Native)
- Search engine optimisation
- Media streaming and transforming media communications
- Web security

#### Mobile Development

- Future technologies and trends
- Mobile interface design
- Mobile Development with Xcode or Android Studio

# Information Technology – Game Development (3D/Mobile)

## Semester 2

The Game Development (3D/Mobile) course is designed to extend a student's understanding of a broad range of computer skills and knowledge using different platforms. The course is designed around the topic of game design and development so that students can quickly transfer their developing knowledge into tangible skills which can be transferred to many other subjects.

This unit is designed to be self-paced and allows for students who are keen to extend their skills and abilities via extension activities and resources.

The main objectives of Year 10 Game Development are to develop in students:

- Investigate future technologies of different platforms for game development
- Design user interfaces and evaluate user experiences
- Learn key design and programming skills to develop games for various platforms (such as using c++/c# programming in Unreal/Unity)
- Create interactive solutions by combining software tools
- Develop the ability to critically think through problems and to be able to produce solutions
- Develop troubleshooting techniques to solve errors

# Year 10 Elective Subjects

## Languages

Years 9 and 10 are transition years in the learning of languages at St Michael's. After at least two years of studying the basics of the language of their choice, students can now concentrate on interacting in this language. Communication is increasingly the keyword.

### French

The French course, both in Year 9 and Year 10, uses diverse texts and the School's computer network to explore a number of themes.

In Year 9, there was a strong emphasis on the use of verbs, and pre-reading skills were developed with the particular study of a simplified classic novel.

In Year 10, Terms 1, 2 and 3, the emphasis is placed on interaction, be it by reading, listening to, speaking or writing information. The verbs introduced in Year 9 are now expected to be used in different tenses, in order to allow students to begin to understand and tell stories.

Topics covered in Terms 1, 2 and 3 Year 10 French:

- Student exchanges (travelling abroad and speaking other languages)
- Biographies (history and stories)
- Poetry and art
- Planning one's future

Term 4: Design in French

In Term 4, students will learn French by using the language, in a Design unit. Students will design and create a logo and a uniform for waiters of an imaginary French café in Melbourne.

### Italian

The Year 9 and 10 courses in Italian make available a variety of written and aural texts that allow students to examine a range of grammatical structures and vocabulary, the main goal being to facilitate communication. Set topics throughout the courses encourage an efficient and systematic approach.

In the Year 9 Italian course, students learn to use the present and past tenses, articulated prepositions, modal verbs and further grammar structures, across a range of different themes.

In the Year 10 Italian course, students examine more complex aspects of the past tenses, the present continuous and future tenses, gerund, comparative structures, prepositions, reflexive verbs, complex pronouns and other grammar structures across some of the following themes:

- Italian geography (various geographical locations, stating what you have done and liked on vacations abroad)
- Italian dwellings (various house types and rooms, describing the location of objects)
- The human body & Italian fashion (parts of the body, stating injuries, daily routines, clothing items, fashion descriptions)
- The Italian diet (aspects of the Italian and Australian diets, expressing healthy and harmful habits)

### Japanese

The Years 9 and 10 courses have been designed to give students the knowledge and skills in speaking, comprehending, reading and writing, in order to enable them to interact with others in Japanese. It has also been designed to develop an awareness of the structure of the language. Students will be required to extend further the range of personal information they can give. They will undertake a range of communicative tasks: both spoken and written, which will require them to learn expressions and grammar patterns.

Topics/themes explored include friends and self, daily routine, school life, eating habits, seasons, festivals and travelling in Japan. Students will further extend their understanding of the Japanese culture and the Japanese way of life.

By the end of Year 10, we expect students to be able to:

- Communicate appropriately in a variety of situations within the family, school, peer group and community to maintain social relationships in Japanese
- Use and adapt models to express opinions about aspects of daily life and learner interests, providing some facts to support these opinions
- Use some socially and culturally appropriate communication strategies in oral interactions

- Read for enjoyment passages of about a page in length, with a strong story line or message but some unfamiliar language, using strategies such as contextual clues or reference to a dictionary where necessary
- Employ strategies such as scanning to retrieve information from texts which may include some unknown vocabulary and structures
- Identify socially and culturally important features of texts read
- Construct sentences accurately and appropriately using a wide range of vocabulary and grammar patterns
- Write to express opinions developed through discussion and research in culturally appropriate ways
- Demonstrate knowledge of the paragraph and flow, and structure texts effectively when drafting and editing work for publication

# Year 10 Elective Subjects

## Media

### Semester 1 and 2

By studying Media, students learn the whole process from their original idea to a finished movie. This course teaches students the skills of script, camera and editing. Students identify specific stages and roles in movie making. They will work in a collaborative environment to produce a finished movie using professional software such as Adobe Premiere Pro, Audition and Sony Vegas. They will also have the option to show their final work, both internally and by entering in film competitions.

A student should consider taking up this subject if they have an interest in film-making and would like to develop their movie making skills. In this course students undertake specialist roles during the production to create a unique film reflecting their ideas.

The main objectives of the curriculum in Movie Making are to develop in students:

An overview of the role of film in society

- The evolution of film-making technique and its influence on society and culture
- The nature and use of contemporary film-making technology
- An understanding of the diversity of media from commercials to full length feature films
- Narrative skills and their integration into film-making
- An understanding of how images are composed and the influence of music and background audio on a film
- Links with the music technology course to produce original music scores for their films
- An awareness of film-making for public display

The topics covered in the course include:

#### 13 Frames (20%)

- Narrative structure
- Creativity
- Presentation

#### The Pitch (25%)

- Design brief
- Folio
- Presentation

#### Major Film Project (55%)

- Role and responsibilities
- Pre-production, production and post-production
- Narrative structure and storyboard
- Creativity in acting and camera
- Editing and foley
- Final screening
- Written reflection

# Music

## Semester 2

This course provides students with the opportunity to extend their music performance skills and experience.

The areas covered include solo performance, ensemble performance, listening and analysis, composition and extended aural and theory skill development including melodic and rhythmic transcription, score reading and the recognition and transcription of intervals, scales and chords.

The main objectives of the course are to develop:

- An understanding of the expressive and creative nature of music in solo and ensemble situations
- Techniques in solo performance practice
- Techniques in ensemble performance practice
- Extended techniques and skills in theory and aural comprehension
- Extended techniques and skills in music analysis of contemporary and classical music (aural and written)
- Techniques and skills for composition
- Appreciation of experience in both traditional and contemporary popular forms
- An understanding of the requirements of VCE Music Solo Performance and to be confident and prepared for Year 11 music

The units covered in the course include:

- Composition and performance, assessed through the completion and performance of an extended composition
- Ensemble performance, assessed through participation in a school ensemble or choir and a rehearsal reflection task
- Solo performance, assessed through a ten-minute performance on an instrument of choice (including voice).
- Music analysis, assessed through listening analysis written tasks and end-of-semester examination
- Theory & aural comprehension, assessed through ongoing quizzes and end-of-semester examination

Prerequisite information:

It is recommended that students have completed AMEB Grade 3-4 level (or equivalent of two years of formal lessons) on their instrument or voice. Students undertaking this course are expected to participate in a St Michael's ensemble or choir. This can be arranged at the commencement of the course.



# Year 10 Elective Subjects

## Photography

### Semester 1 and 2

This course is designed to provide students with the opportunity to learn the fundamental skills and techniques needed to develop a strong folio of work in photography. In this course, students will spend the semester learning how to work digital and analogue cameras, how to develop black and white film and explore darkroom printing processes.

Students will examine the way in which artists have worked in photography and the processes they follow in order to develop their successful careers. Students will also learn to analyse, compare, contrast and write about photographic artworks from different times and cultures and investigate the chronologic nature of photography from the past to the present day.

The main objectives of the Photography curriculum in Year 10 Visual Arts and Design are to develop in students:

- The ability to apply fundamental art and art historical terminology
- An appreciation for the process of analogue and digital photography
- The ability to analyse works of art in context of historical evidence
- A greater understanding of the traditional skills used in black and white film photography
- An understanding of the essential materials and techniques of darkroom and digital processes.

The topics covered in the course include:

- Operation of analogue and digital cameras
- Processes of film developing
- Exploration of diverse darkroom techniques
- Exploration of digital techniques
- Application of aesthetics
- Creating finished artworks
- Describe, analyse, interpret, evaluate, applying the rules of observation in art writing

\*This is a discreet unit of study, which runs for a semester.

# Product Design and Technology

This course provides students with the opportunity to experience the process of product design, as used in industrial design and manufacturing. From initial concept, materials and technology selection through to the production process, students will learn about different manufacturing methods and have first-hand use of computer-aided design (CAD) and computer-aided manufacture (CAM). This course also introduces students to the environmental and social aspects to be considered in the design and manufacturing processes.

Product Design and Technology helps students develop critical thinking skills and solve complex and intricate problems. It challenges them to make decisions, to identify opportunities and to take effective and informed action. It also teaches students to be aware of talent and expertise in others and to value group work, while respecting healthy competition. Students learn about the process of product design through a variety of design-and-make tasks. The course encourages and assists students to be more creative and innovative whilst they acquire valuable skills in problem-solving, analysis and design. Throughout the course, students learn to work both independently and as part of a team.

## Semester 1: Digital Design and Technology - Speaker Design

In this module, students will develop the knowledge, understanding and skills necessary to successfully design and manufacture a designer speaker unit for operation with smart phones and most compact media players.

Students develop the ability to:

- Manually produce innovative and detailed design work
- Demonstrate a good understanding of a wide range of materials including acrylic, other plastics and electronic components and circuitry
- Select and use materials and a range of tools, equipment and machines to design, plan, implement and evaluate a solution to a particular design problem
- Plan effectively for production
- Understand CAD/CAM and basic applications
- Consider environmental and social issues relating to design including sustainability

## Semester 2: Designing for Children: CAD/ CAM

In this module, students will develop the knowledge, understanding and skills necessary to successfully design and manufacture products using a variety of materials and machinery including computer-aided design and manufacturing.

Students develop the ability to:

- Produce innovative and detailed designs electronically through the use of CAD software
- Demonstrate a good understanding of a wide range of materials
- Consider the importance of model making using 3D printing technologies
- Select and use materials and a range of tools, equipment and machines, including CAM to design, plan, implement and evaluate a solution to a particular design problem
- Plan effectively for production
- Consider environmental and social issues relating to design

# Year 10 Elective Subjects

## Sports Development

Sports Development enables Year 10 students to build upon their learning in Health and Physical Education from Years 7-9. The course assists in preparing students for VCE Physical Education and may also assist with developing skills relevant to employment in the sport and recreational field. Specifically, this course focuses on those aspects that relate closely to sports performance, including coaching, officiating, fitness and conditioning and games analysis. It caters for a wide range of student needs and will assist students in developing many skills, including:

- High levels of performance skill in a chosen sport
- The capacity to adopt a variety of roles in sport
- The skills of coach, fitness trainer, referee and games statistician
- The skills necessary for students to possibly acquire recognised external qualifications in these areas

Course structure: Sports Development offers two semester-based units: Performance in Semester 1 and Coaching and Officiating in Semester 2.

### Semester 1: Performance

In this module, students develop the knowledge, understanding and skills necessary to successfully improve their own athletic performance in a chosen sport.

Key outcomes include the ability to:

- Describe the relationship between anatomy, physiology and performance
- Design programs that respond to performance needs
- Measure and evaluate physical performance capacity
- Demonstrate competence and confidence in a specific sport
- Analyse the fitness requirements of specific activities

### Semester 2: Coaching and Officiating

In this module, students develop knowledge, understanding and skills in one of the following roles: sports coaching and training methodology, officiating, fitness and conditioning.

Key outcomes may include the ability to:

- Conduct independent research
- Conduct training sessions and teach new skills
- Analyse performance characteristics, rules, performance outcomes, offensive/defensive strategies and how to manage team dynamics
- Design, implement and evaluate offensive and defensive strategies for a school sport team in a chosen activity
- Complete a coaching accreditation program for a chosen activity
- Demonstrate leadership skills and a capacity to work cooperatively in movement contexts

# Theatre Arts

Theatre Arts is a drama and theatre studies based course comprising of two semester-based units. It is designed to give students a choice of these two subjects at a VCE level. The course caters for anyone wanting to learn more about performance, theatre and drama and the production elements associated with these areas. The course is also designed for students wanting to improve their communication skills and their understanding of the performing arts in our society.

The main objectives of the curriculum in Theatre Arts are to develop in students the ability to:

- Communicate, interact, share ideas and respond to others
- Create and perform original work
- Focus energy with intensity and purpose
- Act honestly and convincingly
- Analyse effective work
- Perform different roles on stage
- Explore non-naturalism as a style of theatre

## Semester 1: Extended Improvisation

Topics covered in this course include:

- Commedia Dell'arte (20%)
- Boal and Theatre of the Oppressed (20%)
- Playback Theatre (20%)
- Long Form Game and Narrative Improvisation (20%)
- Creative improvised response to stimulus material (20%)

## Semester 2: Physical Theatre, Direction and Non-naturalistic Ensemble Creation and Performance

Topics covered in this course include:

- The exploration of the actor as a physical being and the importance of this idea to performance and text interpretation (35%)
- The role of the director in the overall process: students have the chance to direct their peers in scenes, exploring and manipulating the dramatic elements (35%)
- Non-naturalistic Ensemble Creation and Performance: students have the opportunity to create, write and act in original work as part of the Malthouse Theatre SUITCASE project (30%)

# Year 10 Elective Subjects

## Visual Arts

### Semester 1 - Skills and Techniques

This course is designed to provide students with the opportunity to learn skills and techniques needed to develop a strong folio of work and a successful finished piece of art. In this course, students will spend the semester learning the basic skills required for each studio area offered by the Visual Art Faculty such as drawing and painting, sculpture and print processes.

Students will examine the way in which artists have worked in each area and the processes they follow in order to develop their successful careers. Students will also learn to analyse, compare, contrast and write about artworks from Eastern and Western cultures and investigate the chronologic nature of art and design from pre-history to present day.

The main objectives of the Skills and Techniques curriculum in Year 10 Visual Arts and Design are to develop in students:

- The ability to apply fundamental art and art historical terminology
- An appreciation for the process of art making
- The ability to analyse works of art in context of historical evidence
- A greater understanding of the traditional skills used in art making
- A broader understanding of the essential materials and techniques used in art making

The topics covered in the course include:

- Drawing and painting from observation
- Editioning processes within the printmaking art form
- Sculptural materials and techniques
- Describe, analyse, interpret, evaluate, applying the rules of observation in art writing

\*This is a discreet unit of study, which runs for a semester.

### Semester 2 - The Art of Self Expression

This course is designed to provide students the opportunity to apply their skills and techniques learnt in previous practice to a series of artworks that expresses their own interpretation of an idea or theme. Students examine the way in which artists have interpreted their worlds and expressed their ideas and emotions through a visual language. Students are introduced to various concepts and frameworks, including form and function, symbolism, realism, colour and expression and the artist as recorder. Students are expected to complete two final artworks as well as analyse and write about artworks from past and present cultures.

The main objectives of The Art of Self Expression curriculum in Year 10 Visual Arts and Design are to develop in students:

- The ability to interpret visual cues to understand the language of art
- An appreciation for the process of making and displaying art
- An understanding of the purpose/function of art throughout the centuries An understanding of artistic techniques to express and explore themes, issues and ideas
- Skills in structuring and presenting 2-D and 3-D art works appropriate to chosen styles and forms
- Analytical and interpretive skills when discussing the content, structure and aesthetic qualities of art works
- Analytical and interpretive skills when discussing the characteristics and roles of art in different cultural contexts

The topics covered in the course include:

- Developing a thematic direction
- Exploring styles and techniques
- Applying your aesthetic
- Creating a finished artwork
- Reflection: what constitutes a successful art piece

\*This is a discreet unit of study, which runs for a semester.

# Visual Communication Design

Visual Communication Design offers two semester-based units: Information Design in Semester 1 and Environmental Design in Semester 2. These discreet units give students the opportunity to assume such roles as graphic designer, industrial designer, interior designer, architect, engineer, draughtsperson, landscape architect, illustrator, animator, cartographer, finished artist or storyboard artist for film and television.

This course introduces the use of graphic design systems and devices, as well as developing an understanding of the materials and media specific to this area. It scrutinises the significance of a design brief and the client-to-audience focus of this area. It explores the production processes involved in completing design work and develops an understanding of the purpose and needs in design within a cultural context, through the analysis and evaluation of existing design in our environment.

The main objectives of the Visual Communication Design curriculum are to develop in students:

- Their imagination to explore possibilities for representing ideas
- Skills in drawing using a range of techniques and media
- Skills in using computer-aided design
- Drawing as a way of recording ideas and observations
- Skills in the use of selected design elements and principles
- An understanding of the application of selected graphic devices and systems
- An understanding of graphic communications in past and present contexts through written and verbal description, analysis and comparison of styles, purposes and content
- An ability to recognise the need for the graphic communicator to consider their audience
- A language of communication with clients within the School community, such as production directors and community relations teams to arrive at an understanding of what is needed for a design brief
- The ability to produce a final design that meets the aesthetic and functional requirements when making graphic communications to answer a client's needs

## Semester 1 - Information Design

The topics covered in this course include:

- Developing observational drawing and rendering skills using a range of graphic materials and media
- Creating visual solutions to design problems that investigate and apply the use of the elements and principles of design to a drawing system: perspective drawing
- Working to a design brief and developing the design process
- Creative poster design
- Analysis of layout, presentation and the effectiveness of selected graphic communication

## Semester 2 - Environmental Design

The topics covered in this course include:

- Research into the Environmental Design field: landscape, exhibition, exterior and planning
- Investigation into architecture: historical context
- Drawing systems in the representation of 3D design
- Model making
- Architectural practice



# Immersion Projects

## Art and Design Master Class

Have you ever drawn something from observation but you wished you had a better way to render or control proportions? Drawing and observation skills are practised and take hours to develop and master. The process of photography, modelling, oil painting and etching are also skills that take a great deal of time to perfect. Master Class has been created to help improve the skills of students to allow them to make more informed choices with their Art and Design subjects, and to strengthen and consolidate skills for VCE.

### Aims

This course will give students an opportunity to develop skills and apply techniques within instructed workshops with specialists. Students can learn more effective ways to use the media and the various processes taught in Visual Art and Design, but with more depth and practice. Master Class will strengthen key drawing and design skills in preparation for VCE Arts and Design and contribute to a stronger folio.

- Observational drawing – still life: Students will learn how to ensure balance and proportion and apply a variety of drawing and painting media to represent form, including graphite, charcoal, pastel and oil paint

- Introduction to ceramics - working on the pottery wheel and low firing processes
- Printmaking using the intaglio technique
- Working in the darkroom: An introduction to analogue cameras, processing 35mm film and printing images through the enlarger in the darkroom
- Curating an exhibition

The course is highly practical in focus. All students are given significant opportunities to apply theoretical understanding to practical situations.

Additional cost: \$1250 which will be charged to School fee account on the 2019 Term 2 invoice.



# Cambodia Project

St Michael's has developed a range of connections with non-government programs in Cambodia. We have the opportunity to offer students a unique educational experience that we believe will be mutually beneficial to both our students and organisations in Cambodia.

In choosing organisations to connect with, we have worked through a range of challenging issues. The country is rapidly recovering from the appalling events of its recent past. However, there is little in the way of coordination of programs in the country, and with a demographic pattern slanted heavily towards children, the exploitation of those most at risk is very real. We have therefore made a conscious decision not to work with orphanages. The best programs for our support are schools and educational institutions that are run, either at a government level or by Khmers. We have also sought organisations for which our students can fulfil a genuine need.

Clearly, Cambodia's history has been a dark one but it is one from which the country is rapidly emerging. Decisions on how and where to develop a program by the School in Cambodia have been carefully developed based on student safety as the key priority. To facilitate this we have decided to work in partnership with Projects Abroad [www.projectsabroad.com.au](http://www.projectsabroad.com.au). Projects Abroad is a UK founded NGO that facilitate volunteers around the world. They offer a range of volunteer programs in Cambodia including school group programs.

The students will spend their time in Siem Reap, Phnom Penh and Kampot.

## General

- Establish connections with Cambodian communities
- Develop skills in planning and implementation of development programs
- Exposure to a different culture
- Develop leadership skills
- Encourage independent learning in all students
- Develop a sense of responsibility for self and others including funding the venture
- Develop an ability to work cooperatively both within the group as well as with the community representatives in Cambodia

## Development & Poverty Studies

- Develop understanding of global poverty issues
- Understanding of the complexities of urban and disability poverty issues in a developing country

- Understanding of regional political issues

## Skills completed prior to departure

- Teaching students how to teach English and run sport activities to Cambodian students

## Prerequisite information

- Interest in global development issues
- An interest in developing teaching skills
- The ability to swim 400 metres
- Motivated to reduce personal footprint (e.g. working of methods to self-fund)
- Work well in a group – enjoy working with and for others
- A desire to be challenged
- Self-motivation
- Established commitment to Community Action Programs
- Being a good and positive team member
- An ability to travel well and patiently - we will be flying to Cambodia, then travelling by bus
- Being a flexible person - we are travelling to a developing country and as such it will challenge those who go in with rigid expectations

## Restrictions

- The cost of the program is an estimation based on current exchange rates and airline prices. It may therefore increase from the current quote
- Limited places will be available due to the nature of the program
- Students will need to complete a survey as part of the application process. Students may also be asked to attend an interview if there is significant student interest

Additional cost: Aprox. \$5500-\$5900 which will be invoiced progressively as travel arrangements are confirmed.

# Immersion Projects

## Engineering – Exploration and Drones

With the drone commercial market being predicted to grow to \$17B by 2024, this immersion will equip students with the skills to safely pilot a commercial grade drone for aerial photography purposes and also give students the opportunity to build their own drone from scratch.

Activities in this immersion could include: scouting locations for shoots, monitoring weather systems, learning about CASA drone regulations, shot list and storyboarding concepts, site surveys, flying drones, post production techniques, preparing an exhibition of work, using 3D CAD software and CNC routers, soldering irons and off the shelf drone parts to assemble and program a Drone in a small group.

Students will require:

- No previous knowledge or experience
- A valid topped up myki to travel to shooting locations
- A working laptop for post-production

Additional cost: There is no additional cost for this program.

## Bon Appétit

An engaging food experience aimed at developing key skills in a range of situations. Students have the opportunity to immerse themselves in workshops designed to build competency and confidence and prepare them for further study in the culinary field, or enable them to apply for a hospitality-based job.

Content:

- Completion of an accredited Food Handler's Certificate
- Espresso making course - William Angliss Institute
- Macaron masterclass run by a pastry chef in the kitchens at William Angliss Institute
- A trip to the Fareshare Food Charity to learn about sustainability, food waste and preparing food for those less fortunate
- Cake decorating
- Preserve making
- Catering Australia's Biggest Morning Tea for staff as a Cancer Council fundraiser

Additional cost: \$800 which will be charged to School fee account on the 2019 Term 2 invoice.

# Great Barrier Reef

The Great Barrier Reef Project (GBR) is an experiential learning program that aims to deconstruct the traditional classroom and take students to the real life learning environment. This program is part of the Year 10 Unit 1 Enhanced Biology VCE subject. It is the enrichment component which complements and is integral to the unit.

Year 10 students spend approximately two weeks in Northern Queensland with a focus on the Great Barrier Reef and practical marine biology experience. Significant time will be spent on Orpheus Island at the James Cook University (JCU) Research Station, where the students study the reef ecosystem first-hand through snorkelling and a range of practical activities. A JCU marine biologist will work closely with the students to provide them with an in-depth insight and understanding of the reef ecosystem. During this time they will complete aspects of each Area of Study in Unit 1 with a focus on Area of Study 3 for their own practical investigation on the reef.

Students will also travel to the outer reef staying on a live-aboard vessel for several days.

Students wishing to participate in the GBR program must achieve a B+ in Year 9 Science and a B average across their Year 9 academic program in order to apply. If successful in achieving this academic standard, students must enrol in Unit 1 Enhanced Biology as one of their Semester 1 Year 10 electives in which attendance on the GBR program is compulsory. Students cannot attend the GBR program without electing Unit 1 Enhanced Biology in Semester 1.

Please note: If students wish to apply to do Units 3 & 4 Biology early (in Year 11), they must have completed both Unit 1 Enhanced Biology (offered in Semester 1 only) and Unit 2 Biology (offered in Semester 2 only) in Year 10.

## Aims - Academic

- Satisfy the requirements of VCE Biology Unit 1
- Exposure to a unique marine ecosystem and environment
- Opportunity to undertake advanced VCE study
- Encourage independent learning in students

## Aims - General

- Developing a sense of responsibility for self and others (school work and life skills)
- Developing an understanding of group dynamics
- Fostering the ability to work co-operatively in teams
- Developing leadership skills as well as the ability to follow instructions and work in a team
- Fostering an empathy and respect for the different environments

Additional cost: \$4500 - \$4700 which is invoiced progressively as travel arrangements are made.



# Immersion Projects

## Guitar Building

Guitar building enables students who are passionate about music making and instrument building to create a unique instrument. This year will see the offering of steel string acoustic guitars or the possibility of a Fender style electric guitar.

### Aims

Specifically, the course focuses on completing a copy of a steel string Martin guitar that is ready to play or depending on numbers, a Fender style electric guitar. During the process, students learn about numerous woodworking and metalworking skills and how these are applied in the field of guitar building.

- Obtain skills as a luthier
- To obtain knowledge and understanding of the working properties of specialist timbers

The course is very focused and highly practical.

Preliminary planning: Before commencing the two-week immersion period, students will be required to:

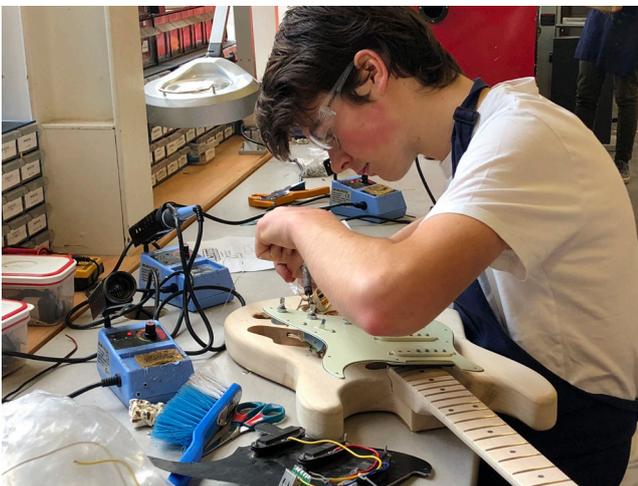
- Assemble and identify all parts of their guitar kit
- Set up the way they intend to keep a record of their process
- Learn and practise the skills of processing and finishing timber
- Read the plans and instruction

Prerequisite information: There are no prerequisites for this course.

Restrictions: There are no restrictions for entry to this course.

Number of students: Maximum 8

Cost: The anticipated cost for this program is \$500.



## Jabiru

The Gundjeihmi Aboriginal Corporation (GAC) are the representative body of the Mirarr Aboriginal people of Australia's Northern Territory, based in Jabiru within the Kakadu National Park. This program brings Year 10 students to Jabiru to work with GAC's Residential school, Djidbidjidbi College, and the Jabiru Area School. The immersion gives St Michael's students real interaction with local students, elders and Kakadu Indigenous rangers. Growing understanding of culture, history and way of life. A full-time member of staff from The Outdoor Education Group leads the program along with two staff from St Michael's Grammar School.

### Outline

The Program involves bush walking with elders and rangers, allowing the transfer of skills, telling of traditional stories, oral history and understanding the impact of modern intervention on a traditional lifestyle:

- Exploring beautiful country, prehistoric archaeology, rock art and bush craft
- Qualified Outdoor Education staff run the program with the support of local people
- Learning alongside the students of Jabiru Area school both in the town and in the bush
- Sharing of cultures and developing of talents such as drama and music
- The program has space for 20 students and comes at an additional cost which covers flights, accommodation, transport, activities and food whilst the students are on program

**Additional cost:** \$3200 which will be invoiced progressively as travel arrangements are made.

# Professional Sports Experience

The Professional Sportsperson Experience is a learning program that aims to enhance the sports minded students' holistic experience at St Michael's Grammar School. Year 10 students spend approximately 10 days on the Gold Coast and Brisbane with a focus on gaining a significant insight into the daily life of an elite athlete, coach and other professionals involved in sport.

## Outline

Most of the first week will be spent at 'The Super Sport Complex', Runaway Bay, on the Gold Coast. Students will participate in training sessions and various other activities, as an elite athlete would. During this time, students will learn about all aspects of enhancing performance from a physiological, psychological and nutritional perspective. Various professionals will be guests of the program, to not only introduce key lessons to help improve performance but also to examine the various careers in sport for those who help in an athlete's life.

The trip will then head to Brisbane, where students will visit various elite sporting facilities that host the different sports codes local to Queensland. Students will also get the chance to meet up with another independent sporting school for a friendly competition against their local students.

At both locations, there will be recreational excursions planned for both educational and sightseeing purposes, in order to complete the whole experience of the program.

## Aims - Academic

- Introduce year 10 students to the concepts of VCE Health and Physical Education topics
- Consolidate learning from the Sports Development Curriculum already covered throughout the year

## Aims - General

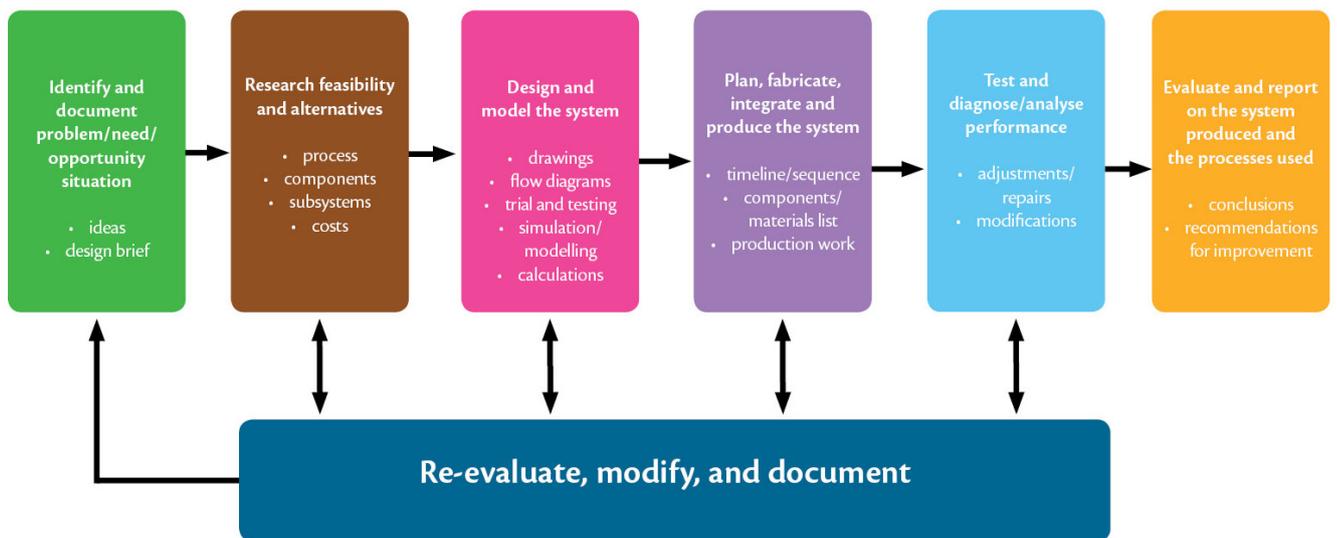
- Develop greater understanding of the careers that exist in sport that support athletes
- Provide an exciting and inspiring experience for students who enjoy sport and all there is to learn about it

Additional cost: \$2900 which is invoiced progressively as travel arrangements are made.

# Immersion Projects

## Systems Engineering

This program is designed as an advanced level STEM experience which will involve students in both practical and theoretical application of the Systems Engineering process:



Students will use this process (above) to complete a design brief based on the international Sailbot Challenge. Students will also cover significant sections of the Units 1 and 2 VCE Study “Systems Engineering” by learning the theoretical aspects of Mechanical and Electrotechnological Systems which they will apply in their design. Students will then have the option of continuing with VCE Units 3 and 4 of Systems Engineering during Year 11 or Year 12.

Additional cost: There is no additional cost for this program.

# Wellbeing - Balance and Vitality

Explore the secrets of living a happier life, while enjoying the beautiful Mornington Peninsula. Do you sometimes ponder the meaning of life? Or at least of your life? Have you experienced 'flow' or wondered what it feels like to 'flourish'? Are you curious about different ways of seeing the world and interested in exploring ideas in open-ended and far-ranging conversations that are not restricted by class times or curriculum outcomes? Would you like to learn more about how to nourish your body, mind and soul?

This philosophy and wellness program is tailored to inspire, inform, challenge and encourage emotional balance to reveal a healthier, happier and more motivated you. Healthy eating, physical activity, music, education, rest and relaxation with tailored excursions, this Immersion Project is designed to enable students to gain a clearer understanding of what motivates them, how they can manage the challenges of life with the right tools for balance, and the strategies they need to embrace life with optimism and courage.

Suitable for students interested in philosophy, psychology, health and nutrition, sustainable living as well as the eastern philosophies of yoga and meditation, the program is run by qualified teachers of yoga, mindfulness, philosophy and the social sciences.



## Program

This program is a combination of day and residential. The first week will consist of activities in Melbourne during the day and the second week will be a residential retreat on the Mornington Peninsula. Whilst in Melbourne students visit a range of different places to learn about and actively practice wellbeing; these will include meditation centres, yoga and cooking schools, African Drumming, an afternoon working with a 'Not for Profit', and some creative zine making, all designed to explore the facets of living well. The residential retreat will include daily yoga, mindfulness practice and daily excursions. Excursions to local beaches, local growers and the Peninsula Hot Springs, the Tree Tops Adventure Maze, a visit to the stunning Panorama Gardens, and a leisurely cycle around Point Nepean, will provide the opportunity for students to connect and interact with the natural world. Students will learn how to plan nutritious and nourishing meals that support vitality and health as well as learn alongside some of the local artisans. have an opportunity to explore key philosophical and ethical considerations for the 21st century.

Students will:

- Have an opportunity to explore key philosophical and ethical considerations for the 21st century
- Have an intensive introduction to the benefits of yoga and mindfulness practices and the links to positive mental health and effective learning habits
- Have an opportunity to explore and learn about themselves through the framework of PERMA.V
- Recognise and build on their personal strengths, leadership styles and way of being in the world
- Have an exposure to and practical adoption of sustainable living practices

Restrictions: There are no restrictions for entry to this project.

Number of students: Maximum 40

Additional cost: \$1600 which will be charged to the School fee account on the 2019 Term 2 invoice.

# Immersion Projects

## Work Experience

Students will organise one or two work experience placement/s to be attended during the two weeks. Some students may choose to organise their placement at a not-for-profit organisation and to donate their time. This will allow students a hands-on experience in the workplace to make them more informed about the type of career involved or the nature of work as a volunteer.

### Aims

- Have a greater understanding of the work environment, everyday tasks and personal skill requirements
- Have a greater understanding of the role of the particular career and if it is suitable to the student's values, skills, interests and goals
- Ask questions to improve the learning and understanding of the career, pathways to this career and possible job opportunities
- Reflect on what is learnt from the work place
- Students when graduating are more likely to be successful in their job hunting skills if they have done some good work experience

### Benefits

- Work experience is a perfect way to sample career options
- Work experience is the best way to get a real sense of a student's chosen industry
- Work experience gently introduces students to the world of work, learning the do's and don'ts of being in a workplace setting
- Help students to identify their strengths and weaknesses across set skills
- Allows students to start networking and building on contacts across various fields of work
- Beneficial to have on a resume

### Preliminary planning

- Writing a resume and introduction letter  
Knowing how to contact work places to organise work experience  
Organising a suitable workplace
- Having the work experience arrangements form completed by the employer, student and parent
- Completing the Occupational Health and Safety module, test and printing certificate

- Giving completed work experience arrangements form and OH&S certificate to staff member in charge for final signatures from the Head of the School
- Contacting employer before work placement to finalise areas such as clothing, food, times of attendance
- Arranging transport and knowing where to attend
- During the two weeks:
  - Attend the work placement/s
  - Be engaged in asking questions and using opportunities to learn and show initiative
  - Ask employer to complete an evaluation form

### Assessment

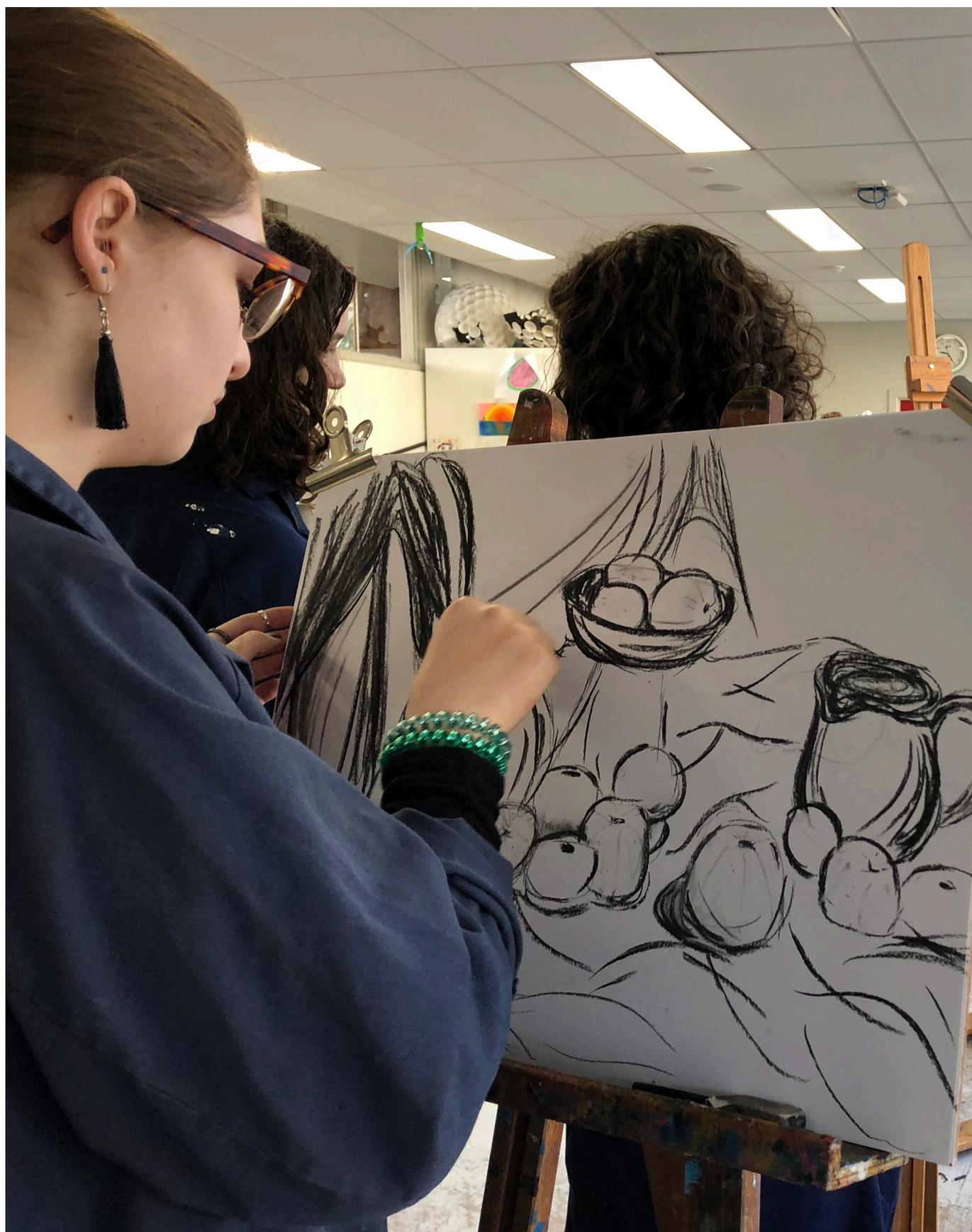
- Evaluation form completed by employer
- Report completed at end of placement by student

Restrictions: Some placements may be deemed 'unsafe' and students will not be permitted to attend. This may include primary industries and hospitality. Work experience is limited by the following:

- Students are not permitted to work between 11.00pm and 6.00am
- The ratio is generally one work experience student for every three employees
- Parents must attach details of any known medical condition which may affect their child during work experience, and any medication or treatment which may be relevant, to the consent form. This will be forwarded to the employer
- A criminal record check of the supervisor is needed if the student is under 15 years of age
- International students may only complete work experience in Melbourne

The work experience program requires a high level of motivation and organisation.

Additional cost: There is no additional cost for this program.



# Additional Learning Needs

## Provision for Diverse Learning Needs

Support Teachers and Learning Assistants provide a range of services to students through teaching and learning programs. A detailed Student Documentation System ensures staff are informed about the specific needs of individual students. Individual case meetings are also held when required. The Additional Learning Needs Faculty works closely with internal staff, visiting teachers, occupational therapists, speech therapists, audiologists, psychologists, physiotherapists, behavioural optometrists and speech pathologists.

Services include:

- Provision of advice, information and consultation to the student's teachers and other relevant staff members
- Provision of professional development for staff
- Programs for high achievers, such as Future Problem-Solving, Tournament of Minds and access to external gifted and talented programs
- Language Experience Program (LEX) for students with acute, ongoing literacy and learning needs in Years 7-10
- In-class support
- Numeracy skill development through the differentiated Mathematics Program in Years 7-10
- Faculty support through professional development and strategic consultancy
- Diagnostic assessment and referral
- Consultation with community-based specialists
- Parent and family advice
- Program Support Groups, for students that meet funding criteria, to ensure shared decision making and understanding

## Years 9-10 Language Experience Program (LEX)

Language Experience classes focus on assisting students in the areas of reading improvement, spelling techniques, development of written expression, development of study techniques, self-organisation techniques, "learning to learn" strategies and examination techniques. Students build on their language skills enabling them to be increasingly responsible for their own learning.

Entry into this course is negotiated on an individual basis; however, eligible students must have a diagnosed literacy difficulty or disability.

LEX consists of core content that includes units of work related to other subject curriculum, as well as units of work that cater for individual needs. It involves developing study skills and building strategies for effective reading and writing. A wide range of tasks are presented and the course content is both relevant to the developmental skills of the student and designed to address specific learning needs.

LEX is focused on success and the achievement of key critical skills. Student achievement stems from the presentation of relevant and targeted tasks, an individualised approach and opportunities to transfer new skills to regular subject areas. Students also have the opportunity to seek individual help with planning, drafting and editing of their work for other subjects. As with all other subjects, assessment is based on the submission of class work and assignments, the results of which are communicated to parents through the online reporting system.

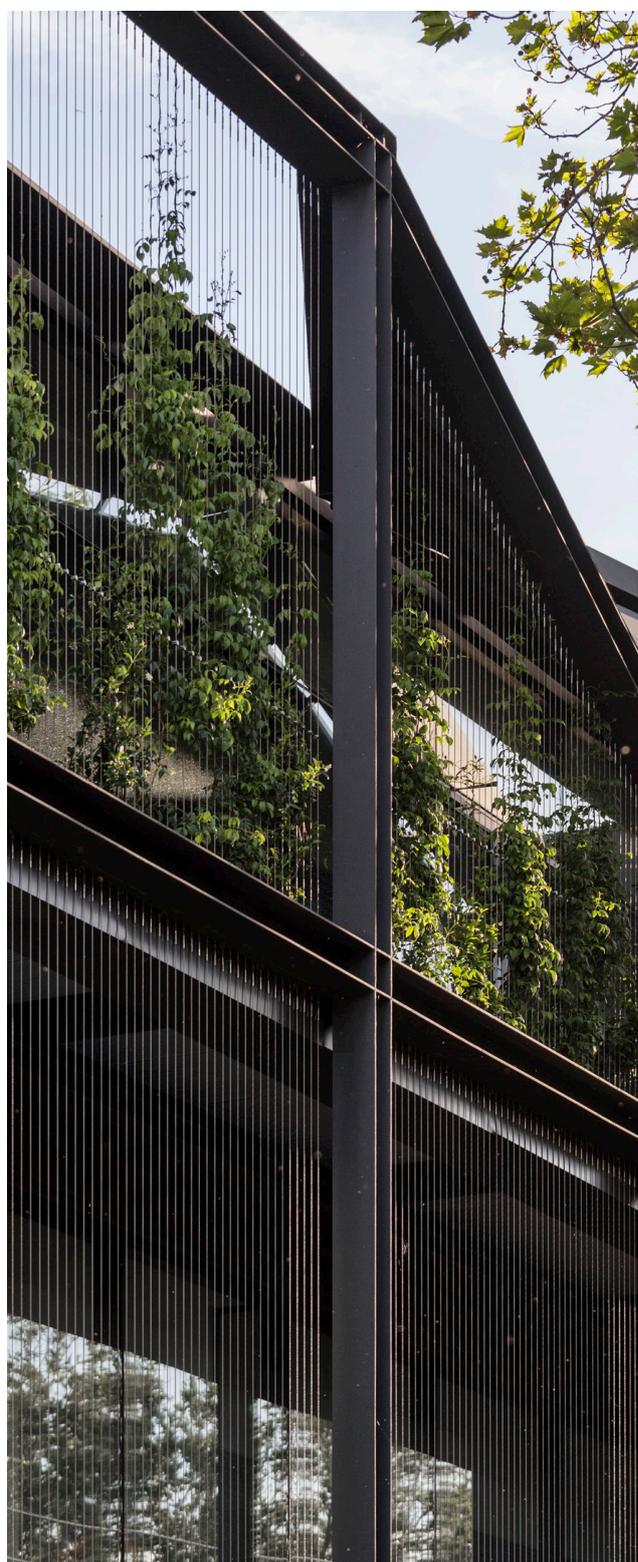
## Years 6-10 Mathematics Program

The Mathematics program from Years 6 to 10 takes students' current skills and knowledge into account by pre-testing each module. Students are then grouped according to their level of understanding and teachers target the teaching to the students' identified needs. Six modules are taught over the year and classes are re-formed for each module. Students with significant gaps in their knowledge are placed in smaller classes which enables a greater focus on each individual's growth. Students demonstrating comprehensive knowledge at a particular year level are placed in classes where they will progress to the next year level, or beyond, depending on their demonstrated understanding.

## Academic Enrichment

Additional Learning Needs staff assist teaching staff with the development of appropriate programs and tasks for students requiring enrichment in specific subject areas. The Year 7 testing platform assists the School to identify those students with high ability and to plan for their future learning.

Students are also able to further develop their talents by becoming involved in co-curricular activities provided through Drama and the Performing Arts, Music, Mathematics challenges, Science competitions, Art, Sport, Outdoor Education and external gifted and talented programs.





# Outdoor Education

Outdoor Education is compulsory for students from Year 3 to Year 11. The emphasis is on personal growth through outdoor experiences focusing on three strands: self, others and the natural world. Each year level has a specific theme designed to build sequentially on students' past experiences.

## Year 10 Exodus Overview - Journey to Simplicity

Year 10 Exodus is a seven-day bushwalk which focuses on personal organization and group (community) responsibilities. This is reflected by students being required to organise their own food and carry all that they require for the Exodus. For many students this is the peak of their compulsory Outdoor Education Program for which they have been preparing for since Year 7.

The theme of this program is 'Journey to Simplicity' and it is designed to physically and mentally challenge students whilst they participate in a significant seven-day bushwalk journey. There are two venues from which to choose: Hattah National Park or Wyperfeld National Park. In Year 10, there is also an option for a 24-hour solo experience which students can opt into.



# Notes





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