

# 2025 YEAR 9 HANDBOOK

Create your future

# Year 9 Handbook

#### Welcome to Year 9!

During Year 9, students continue their studies in the core subjects of English, Mathematics, Humanities, Science, Health & Physical Education, and Engage. Students then begin to explore their own interests and future pathways through an elective program. Year 9 students also participate in a 60-minute Explore session each week, where they spend time researching different career options, creating career profiles, and developing pathways that will help them achieve their future goals.

Students will participate in four semester-based electives across the year. These electives must include <u>at least one subject each</u> from The Arts and Technology. Students can then select two other electives from any learning area. The elective program allows students to experience subjects that relate to pathways they may be considering pursuing at the Senior Campus, when they select from the broad range of Year 10 electives offered in the following year. Trying different electives enables students to have learning experiences that make them better informed when they eventually select Year 11 and Year 12 VCE, VET or VCE(VM) studies.

Semester 1	Semester 2	
Engage	Engage	
Explore	Explore	
English	English	
Mathematics	Mathematics	
Science	Science	
Humanities	Humanities	
Physical Education & Health	Physical Education & Health	
Elective 1*	Elective 2*	
Elective 3*	Elective 4*	

\*At least one each from The Arts and Technology



# **Important subject selection information**

- You will nominate 10 electives in order of preference, with 1 being the elective you want the most.
- You must select one subject from The Arts and one subject from Technology
  in your top 4 preferences.
- Every effort is made to ensure you receive your top preferences for electives.
   However, if this cannot occur, you will be placed in another elective based on your order of preferences, so it is important you consider the order you put them.
- Factors such as student numbers, teacher availability, specialist rooms, and the
  timetable arrangement impact if an elective will go ahead. If you select an
  elective that does not run, you will be allocated to the next elective from your
  preference list.
- Some electives carry an additional cost for factors such as equipment, consumables, or excursions. This will be indicated in the elective information.
- Subject selections must be done online through Edval using your student code.
  - Subject selections open on Monday 26th August (Week 7)
  - Subject selections close on Sunday 1st September

# How should I choose electives?

**You should** consider the following questions when choosing electives:

- Which subject areas do I enjoy?
- Which subjects do I do well in?
- Do I prefer hands-on subjects or academic subjects?
- What knowledge or skills might I need for my future career pathway?

You **should not** choose electives based on:

- What your friends are choosing.
- Your favourite teacher.
- What you think will be "easy".



# **Electives overview**

Visual Arts	Performing Arts	Technology	Health and PE
Visual Art	Dance	Cafe Culture	Advanced Physical
Ceramics and	Theatre Performance	Multicultural Cuisine	Education
Sculpture	Music Performance	Clothing and Design	Sports Coaching
Media	The Digital Musician	Business and Marketing	Lifelong Physical Activity
Architecture and Graphic Design		Product Design	
		Project STEM	High Ability Sports Program
		Game Programming and Design	
		Interactive Web Development	
STEM	English	Humanities	Languages
Forensic Science	Creative Writer's Workshop	Philosophy - The Big Questions	Italian
Advanced Mathematics		Community Engagement	

All students must participate in **at least one Arts** (visual or performing) and **at least one Technology** elective.



# **Year 9 Core Subjects**

# **English / EAL English**

#### Overview

In English, you will continue to develop your skills across the key areas of reading, listening and speaking, and writing. You will explore Media and Issues, Persuasive Writing, Literature Analysis, Comparing Texts and Creative Writing.

# Knowledge and Skills

In Year 9 English, you will listen to, read, view, speak, write, create and reflect on increasingly complex and sophisticated spoken and written texts across a range of contexts. You will learn to appreciate, enjoy and use the English language in all its variations and develop a sense of its richness and power to explain feelings, convey information, form ideas, facilitate interactions with others, entertain, persuade and argue. Finally, you will build an interest in texts, through the study of different text types, and develop an informed appreciation of literature.

#### Assessment

- Book work and activities
- Text Response Essays
- Writing Tasks
- Oral Presentations

# **Humanities**

#### Overview

Humanities is a broad subject that includes History, Geography, Economics, and Civics and Citizenship. This subject will help you understand how and why groups of people settled where they did, organised their societies, got rich (or poor), made friends (or enemies) and modified the natural environment to suit their own needs.

# Knowledge and Skills

In History, you will learn about the making of the modern world (from 1750 to 1918), investigating the reasons people moved around the globe in this era, the history of the Australian nation and our involvement in World War One. In Geography, you will learn how we are all connected, the importance of trade, how food is produced and how we can combat world hunger and other global issues. In Economics, you will discover the world of work, businesses and money and learn how people find jobs, what jobs there are, the rights of workers, budgeting and the stock market.

- Book work and activities
- Text Response Essays
- Writing Tasks
- Oral Presentations



### **Mathematics**

#### Overview

This subject combines a range of teaching methods and classroom practices with an online learning environment to support individualised learning for each student. You will develop your problem solving, independent learning, and group work skills, and build a growth mindset towards your mathematics learning.

# Knowledge and Skills

In this subject you will be using an online platform and assessment system called MathsSpace. Lessons will be based around the 3 core strands of Number & Algebra, Measurement & Geometry, and Statistics & Probability. You will complete work individually in your exercise book, guided by questions and videos. Time will also be spent working on Rich Tasks, which have a focus on problem solving and real-world applications. You will also focus on building a growth mindset towards your mathematics learning and engage in regular reflection and goal setting activities. One session each week also has a Numeracy focus and you will focus on strengthening a particular skill.

#### Assessment

- Topic Tests
- Personalised Exam

#### Science

#### Overview

This subject aims to allow you to further their understanding and knowledge in Biology, Chemistry, Physics and Earth Science. You also develop your scientific investigation skills through participating in practical investigations and preparing lab reports.

#### Knowledge and Skills

In Year 9, you will consider the operation of systems at a range of scales. You will explore ways in which the human body as a system responds to its external environment, looking specifically at the nervous system and immune system. You will be introduced to the notion of the atom as a system of protons, electrons and neutrons. You will understand how matter can be rearranged through chemical change and that these changes play an important role in many systems. You will be introduced magnetism and electricity, and how these interact through electromagnetism.

- Topic tests
- Practical report
- Research task



# **Health and Physical Education**

#### Overview

Health and Physical Education allows students to develop specialised movement skills and movement performance, fitness, teamwork and strategic thinking across a range of sports, as well as extend their understanding of factors that influence their physical, mental, emotional, social, and spiritual health and wellbeing.

### Knowledge and Skills

In practical classes you will participate in a range of sports, focusing on developing specialised movement skills, movement performances and strategies, and game tactics. You will also propose and evaluate interventions to improve fitness and physical activity levels.

In theory classes, you will consider the five dimensions of health and wellbeing and how young people can enhance each of these areas. You will also engage in lessons and class discussions around important topics for teenagers including sexuality education, respectful relationships, and the dangers of alcohol and other drugs.

#### Assessment

- Practical Skill Level
- Game Sense
- Theory

# **Engage / Explore**

#### Overview

These subjects form an important part of the cross-curricular program, providing you with time dedicated to building relationships with your peers, connecting with your teacher, setting and reflecting on personal goals, and beginning to explore your future pathways.

# Knowledge and Skills

In Engage, you continue to build your personal, social, intercultural, and ethical understanding. You participate in reflections and set goals to help you grow both as a person and in your learning. You reflect on your ability to manage stress and identify strategies that help you to self-regulate. You also learn to track your stamina for learning and implement strategies to help you increase this over time.

In Explore, you will begin to focus on your future pathways. You undertake personalised career testing, including an interview with an external consultant and use the results of this to begin research future careers. You create a career profile of your choice and identify the steps you need to take to achieve your personal goals.

#### Assessment

There is no formal assessment for Engage or Explore.



# **Year 9 Electives - Visual Arts**

#### **Visual Art**

#### Overview

In this subject, you will explore individual ideas through the creative practice of drawing, painting and printmaking.

# Knowledge and Skills

You will learn about visual arts practices and art styles and use it as inspiration to develop a personal style on themes/ideas in artworks. You will develop an understanding of how artists manipulate materials, techniques and processes to develop and express their messages in art works. You will also analyse and interpret artworks from different cultures, including Australian and International artists, in a historical and contemporary context. You will experiment with art elements and principles, explore and use techniques to create two dimensional artworks using different techniques and processes in drawing, painting/printing. You will also analyse and evaluate your own work and plan for future improvement.

#### Assessment

- Folio
- Workbook
- Written Tasks

#### Media

#### Overview

This subject aims to introduce you to media conventions and develop an understanding of the media in its many forms, including photography and print media.

#### Knowledge and Skills

In Media, you will explore media arts practices in digital photography, advertising, genre conventions and representation. You will learn camera techniques and processes and develop skills in editing and the presentation of media work. You will also work in small groups to produce and evaluate your work. You will analyse, interpret and evaluate media forms, texts and the social and cultural context of media productions. You will also analyse and evaluate your own work and plan for future improvement.

- Film Review
- Practical Work
- Workbook



# **Architecture and Graphic Design**

#### Overview

In this subject, you will develop your ideas, skills and present visual communications based on Architectural and Graphic design based on the requirements of a brief.

# Knowledge and Skills

In this subject, you will learn about manual and digital drawing techniques to create visual communications in Architecture and Graphic design. You will learn how analyse and evaluate factors that influence design in past and present contexts and discuss the work and roles of past and contemporary designers. You will use observation and research for inspiration and ideas and learn how to analyse the design elements and principles used. You will plan and refine design presentations intended for a specific audience, and produce two- and three-dimensional representations using manual, technical drawing conventions and production processes and techniques. You will also analyse and evaluate your own work and plan for future improvement.

#### Assessment

- Folio
- Workbook
- Written Tasks

# **Ceramics and Sculpture**

#### Overview

In this subject, you will develop your practical skills through three-dimensional ceramic and sculptural art forms.

# Knowledge and Skills

In Ceramics and Sculpture, you will develop an understanding of how artists use materials, techniques, technologies and processes to develop and express their intentions in art works. You experiment with a range of ceramic and sculptural techniques and processes and learn how to plan and modify the presentation of three-dimensional artworks. You will learn to create three-dimensional ceramic and sculptural art forms using different techniques and processes and record your progress in a workbook. You will also analyse and interpret ceramic and sculptural artworks from different cultures, historical and contemporary context. You will also analyse and evaluate your own work and plan for future improvement.

- Folio
- Workbook
- Written Tasks



# **Year 9 Electives - Performing Arts**

#### **Dance**

#### Overview

This course will enable you to develop your knowledge and understanding of movement and dance.

### Knowledge and Skills

In this subject, you will be introduced to the elements of dance through exploring aspects of the choreographic process including improvisation and responding to stimulus. You learn how to apply choreographic principles into their own dance making within a group or solo context. You learn and interpret several group dances in a range of styles. You build their critical and creative thinking through reflection on their dance making process and analysis of the history and culture of a chosen dance style. Tasks completed in this unit include. Activities will include improvisation activities and choreographic tasks, choreographing a solo/duo/trio dance using a stimulus, style-specific workshops, researching and presenting a selected dance style, and learning, performing and evaluating a group dance.

#### Assessment

- Choreography task
- Dance Analysis of own and other's choreography
- Learnt Group Dance

#### **Theatre Performance**

#### Overview

In this subject, you will develop an understanding of drama/theatre performance through workshops and performance through the study of theatre styles and forms.

#### Knowledge and Skills

In Theatre Performance, you will rehearse, refine and present work using expressive skills and ideas. You will learn techniques to develop creative characters and analyse and evaluate the elements of theatre/stage craft in your own work and the work of others. You work in collaboration with others and your ideas will be based on a range of stimuli (including songs, art, scripts, photographs, and film), creating solo and group performances for an audience. You will also analyse and evaluate your own work and plan for future improvement.

- Development and performance of solo and ensemble characters
- Performance analysis
- Workbook



#### **Music Performance**

#### Overview

This subject concentrates on the development of instrumental music and performance skills.

# Knowledge and Skills

In this subject you will further develop instrumental music skills and participate in a number of musical experiences and performances. You will choose and focus on one instrument to continue your instrumental skill development. Instrumental choice includes: voice, keyboard, guitar, bass and drum-kit. You may also incorporate other instruments including strings, brass and woodwind instruments into the solo and group performance. This subject involves a combination of creative work, music comprehension, performance, research, and reflection.

You are strongly encouraged to attend weekly Instrumental Music lessons either privately or through the College if participating in this subject.

#### Assessment

- Performance
- Creative task
- Written task

# The Digital Musician

#### Overview

This subject concentrates on the use of music technologies to create digital performance, manage audio equipment, develop digital compositions and analyse music.

#### Knowledge and Skills

In this subject, you learn to use digital technologies to perform, record, edit and compose music. You explore several musical experiences, including PA system management, film scoring, podcasting, analysis, working with a Digital Audio Workstation (DAW), composition, mixing and integrating launch pads and other digital technologies into performance. You are encouraged to explore creative ideas and develop skills in analysis and self-reflection. This subject includes a combination of creative work, digital performance, music comprehension, equipment management, research, and reflection. The use of musical and digital instruments will be integrated into these activities.

- Equipment management and performance
- Creative task
- Written task



# **Year 9 Electives - Technology**

# **Interactive Web Development**

#### Overview

This subject aims to develop your understanding of how a website is structured and functions. You will design and build a website that meet a particular real world need.

#### Knowledge and Skills

In this subject you will investigate the type of equipment that is needed to host a website. The emphasis is on working in collaborative teams to analyse, design, develop and evaluate websites. You acquire skills in image manipulation and use web authoring software to create websites. You also learn to code and build a website using HTML, CSS and the JavaScript programming environment.

#### Assessment

- Research task
- Portfolio of digital solutions
- Timed Exercises

# **Game Programming and Design**

#### Overview

This subject aims to explore the design and development process used to create games by using the Python programming language.

#### Knowledge and Skills

In this subject you will develop an understanding of the equipment that is required for the development of online gaming. You will develop practical skills in the design of digital gaming software, create imagery and produce the code behind the game. You analyse the structure of existing games and the historical context of gaming and the elements which make a game effective, enjoyable and irresistible to players. The emphasis in this subject is also in solving programming problems in a collaborative environment.

- Research task
- Portfolio of digital solutions
- Timed Exercises



# **Clothing and Design**

#### Overview

This subject aims to apply the design process to create and produce finished items of clothing.

# Knowledge and Skills

In this subject you will use a design brief to identify the needs of a client and/or end user to investigate suitable ideas to help you solve a design problem. You will learn how to document design ideas in the forms of rough sketches, fashion drawings and mood boards. You will develop practical skills in designing, cutting and machining and use a sewing machine, overlocker, iron and other tools and equipment in a safe manner. You will also analyse and evaluate your own work and plan for future improvement.

#### Assessment

- Investigation and design
- Production tasks
- Evaluation task

# **Product Design**

#### Overview

This subject aims to develop your ability to design and manufacture a finished product, piece of furniture, or item of jewellery to meet a client's needs.

# Knowledge and Skills

In the subject you will investigate and follow the design process in response to a specific design problem. You use research and communication skills to respond to the needs of a design brief and generate design options. The course provides you with techniques to adapt the design elements and principles to produce a variety of design options. You learn to sketch design options and use software to computer model your refined idea in preparation for manufacturing. Using tools and manufacturing processes, you learn to use a variety of trade techniques and develop the ability to safely use hand tools and a limited range of portable and fixed machinery. You also investigate the influence of design and technology on both historical and contemporary society as well as a range of materials, their functional properties and uses.

- Investigation and design
- Production tasks
- Evaluation task



### **Café Culture**

#### Overview

This subject aims to develop knowledge and skill in the design and preparation of café style cuisine. Nutrition and special dietary requirements of individuals is also investigated.

### Knowledge and Skills

In this subject you will develop practical skills in investigation, designing, producing and evaluating café style products included in breakfast and lunch menus. You gain an understanding of the functional properties and chemical processes of ingredients when producing products.

You investigate nutrition, healthy eating and special dietary needs and take traditional and healthy options into account when given a design brief. You will use a range of processes, tools and equipment suitable for safe and hygienic food preparation.

#### Assessment

- Investigation and planning
- Production (cooking) tasks
- Evaluation task

# **Multicultural Cuisine**

#### Overview

This subject aims to develop your understanding of multicultural cuisines including the origin of recipes and the influence culture has on eating habits, dietary requirements, ingredients, cooking techniques and food presentation.

#### Knowledge and Skills

In this subject you will develop practical skills in investigation, designing, producing, and evaluating food products from a range of cultural influences. You gain knowledge about the chemical properties of foods and how different country's environmental, social and geographical locations influence that country's cuisine, nutrition and eating habits. The impact of food on our environment, society, personal nutrition and healthy eating will also be investigated. You also learn how to evaluate production processes and further develop the ability to work safely and hygienically.

- Investigation and planning
- Production (cooking) tasks
- Evaluation task



# **Business and Marketing**

#### Overview

This elective is designed for students who want to carve their own path and develop a diverse skill set for future success in any career they choose.

# Knowledge and Skills

In this elective, you will collaborate with Whittlesea Technical School to gain a comprehensive understanding of 3D printers and laser cutters. You will apply these technical skills to hands-on projects, while also building your knowledge in business and marketing. Students work both independently and collaboratively with their peers to build their numeracy and literacy skills through the completion of an Entrepreneurial project. They can then use these skills to create a prototype at Whittlesea Technical School that they will then sell at a mock market stall.

#### Assessment

- Designing a prototype to address a real-world problem
- Peer assessment based on collaboration and teamwork
- Presentation of product in market stall

# **Project STEM**

#### Overview

In Project STEM you will learn about how Science, Technology, Engineering and Mathematics (STEM) can be used together to solve real-world problems.

#### Knowledge and Skills

In this subject, you will use the engineering design process together with Mathematics, Science and Technology principles, to design, build and test solutions based on a specific design brief. Using a variety of materials and techniques, you will learn to sketch design options, create prototypes, collect and analyse data and present your work. You will explore the coding of robotics to complete a specific task. You will also investigate how nature can influence the design of modern technology.

- Investigation and planning
- Production tasks
- Evaluation task



# Year 9 Electives - Health and Physical Education

# **Lifelong Physical Activity**

#### Overview

This subject is designed to introduce you to the knowledge, skills and activities used to encourage and promote the importance of lifelong physical activity habits into your lifestyles.

#### Knowledge and Skills

In practical classes, you will participate in a variety of **non-competitive** recreational, outdoor and physical activities including yoga, aerobics, boxercise, walking, cycling, frisbee, golf, lawn bowls, ten pin bowling, darts, archery, cultural games, pickleball, water-based activities and dance. In theoretical classes, you will examine the role physical activity and outdoor recreation play in the lives of Australians, compare the physical activities undertaken in different cultures, and learn to recognise the benefits of regular, lifelong physical activity for your physical, mental, social, emotional and spiritual health and wellbeing.

#### Assessment

- Practical participation
- Project
- Structured Questions
- Investigation Task
- \*Participation in practical sessions is compulsory.
- \*\*Excursions to support learning may be organised and may incur a cost.

# **Sports Coaching**

#### Overview

In this subject, you will investigate and facilitate the different roles of coaching young people in developing their skills required for organised sport.

# Knowledge and Skills

This subject is a combination of theoretical and practical classes. You will explore the different stages of skill learning and learn how to adapt your coaching technique and skills to meet the needs of both a team and individual learner. You will develop your understanding of feedback and learn the skills required to provide effective feedback to your peers to improve their practical skills in a range of sports. You will research, develop and modify different sporting drills and activities while undertaking the role of coach in a range of sports.

- Practical participation
- Practical Coaching
- Theory



# **Advanced Physical Education**

#### Overview

This elective aims to promote teamwork, leadership, skill and technique development and self- confidence. It will also build on your academic knowledge with regular theory sessions.

### Knowledge and Skills

In this subject, you will explore and develop an understanding of various leadership skills by applying these skills while taking on a role in sport (eg. coach, referee, manager) for a tournament in a sport chosen by the class. As a team member you will implement and evaluate successful tactics and strategies along with developing effective teamwork. You will cover technology in sport and study the connection between science and sport through practical participation of biomechanical principles. You also investigate and participate in activities for athletes of all abilities in an Inclusive sport unit. Careers in sport will also be researched and explored.

#### Assessment

- Roles in Sport
- Biomechanics
- Inclusive Sports
- \*Participation in practical sessions is compulsory.
- \*\*Excursions to support learning may be organised and may incur a cost.

# **High Ability Sport Program**

#### Overview

This specialist subject is targeted at students who compete in competitive sports outside of school at a high level and supports you in enhancing your physical and psychological readiness for high performance competition.

# Knowledge and Skills

This subject is a combination of theoretical and practical classes. In practical sessions, you will participate in a range of sports and fitness activities with other high-ability sporting students. You are encouraged to apply the elements of different sports to your chosen sport(s) and create fitness programs that help you achieve your personal goals. In theoretical classes, you will research pathways to elite sports, create progressive training and nutrition programs to enhance performance, and learn about the psychology of elite sports competition.

#### Assessment

- Practical participation
- Project
- Structured Questions
- Investigation Task

Requirements to be eligible for this subject:

- Proven record of participation in Health and PE
- Evidence of sports participation outside school



# **Year 9 Electives - English and Languages**

# **Creative Writers' Workshop**

#### Overview

Do you like to express yourself creatively through writing? This elective will allow you to explore your imagination, where you will create alternate worlds, discover the complexity of characters and generate adventurous plots.

# Knowledge and Skills

Throughout this elective, you will develop advanced writing skills and understand the different literary techniques that authors use in their writing. You will develop your skills through various creative writing tasks designed to promote inspiration and enable you to discover the benefits of keeping a writing journal. You will get to create samples of various writing forms from a wide range of genres and have a chance to enter writing competitions or attend the 'Writer's Festival'.

#### Assessment

- Writing Journal
- Writing folio
- Short story

#### Italian

#### Overview

In this subject you will work towards fluency in spoken and written Italian and apply your skills from previous study in the language to real life scenarios.

# Knowledge and Skills

In our increasingly globalised world, language skills are crucial more than ever before. This elective explores the Italian language and culture through the eyes of an Italian teenager. You will learn more about all of the things we associate with Italy; living in Italy, food, family and fashion. Some of the tasks and topics will include:

- Developing your Italian language fluency for future travel and employment opportunities.
- Exploring the food, fashion, sport, family traditions and travel destinations in Italy.

- Listening and Speaking tasks
- Writing tasks
- Reading tasks



# **Year 9 Electives - Humanities**

# **Philosophy - The "Big" Questions**

#### Overview

Have you ever wondered about big questions like 'Do we have a soul?', 'What is beauty?' and 'Should the death penalty exist?'. In this subject, you will learn to think critically, with an open mind and reflect on ideas you have taken for granted.

### Knowledge and Skills

There are three main areas of study in this elective. The first unit of study is on the subject of Meta philosophy (i.e. what is Philosophy?), paying particular attention to the role played by reason in philosophical investigation. The second area of study, Ethics, engages you on a personal level, asking you to think about your views on contemporary moral issues, such as same-sex marriage, climate change and terrorism. The third area of study is Arguments for the Existence of God, inviting you to consider the nature, logic and difficulties of both ancient and contemporary arguments for and against the existence of God.

#### Assessment

- Communication Tasks
- Essav
- Timed Exercises
- Journal and workbook

# **Community Engagement**

#### Overview

Are you interested in making our local community and the world a better place? By investigating contemporary issues, you will learn to value your belonging in a diverse and dynamic community, develop your independence and understanding of local and global issues and your role as a citizen.

### Knowledge and Skills

In this subject, you will split your time volunteering in the community and learning about local and global issues such as climate change, inequality, and demographic changes. You will learn values which underpin democratic communities such as freedom, equality, responsibility, accountability, respect, tolerance and inclusion. You can positively contribute locally and increase their understanding of global issues by volunteering in some of the following locations; local council, primary schools, kindergartens, aged-care facilities.

- Journal
- Workbook
- Research report



# **Year 9 Electives - Science and Mathematics**

#### **Forensic Science**

#### Overview

In this elective you will learn about forensic techniques and the skills associated with investigating and establishing facts of interest in relation to criminal law.

# Knowledge and Skills

You will learn about the science associated with forensics, such as fingerprinting, DNA testing, chromatography and ballistics. You will discuss a number of cases and look at the evidence that helped solve the crime. You will also use your forensic skills to help solve a staged crime set up in the classroom. Forensic science is about using science to solve puzzles, so critical thinking and testing hypotheses will be part of the elective.

#### Assessment

- Practical Reports
- Investigations

#### **Advanced Mathematics**

#### Overview

This subject is tailored for students with a strong interest in mathematics, offering a solid foundation for those aiming to excel to Year 10 Accelerated Mathematics. It also serves as an ideal pathway to advanced studies, including Maths Methods, equipping students with the skills and knowledge needed for future success.

#### Knowledge and Skills

This elective offers an in-depth exploration of key algebraic concepts, focusing on four critical topics: Indices, Quadratics, Solving Simultaneous Equations, and Polynomials. Students will begin by mastering the manipulation and application of indices, before delving into the complexities of quadratic equations, including their solutions and graphical representations. The course will also cover methods for solving simultaneous equations, both algebraically and graphically. Finally, students will explore polynomials, learning to perform operations, factorise, and solve higher-degree equations. This elective is designed to strengthen algebraic problem-solving skills, essential for success in higher mathematics and STEM fields.

- Interactive Quadrative Modelling
- Design Challenge





# **Middle Years Campus**

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