UPPER YARRA
SECONDARY COLLEGE

YEARS 9 - 10 CURRICULUM

2027

Subject Selections 2027

Upper Yarra Secondary College uses Edval for timetabling and student subject selection.

During the subject selection period, students receive an email to their school Gmail account from 'Upper Yarra Secondary College' which contains the link and their unique 'Webcode' to access their individual selection form.

Students must use their unique webcode to ensure they are making selections accurately.

At the end of each form, students are asked to submit their selections which saves their choices.

Students can change their preferences during the subject selection period. Once the window is over, the selection page will be closed and students will need to speak directly to Mr Tacey to make changes.

All students who complete their selection during the subject selection period are considered equally. Once the subject selection period is over, changes cannot be guaranteed.

Depending on the student's year level the form is configured based on what they need to choose from.

In Year 9, students choose 8 electives, 4 preferred and 4 back-up options, ultimately they are assigned to 4 classes, based on these 8 preferences according to the order of electives listed and availability.

In Year 10, students have a longer form, but some of this is pre-selected for their core classes such as English and Humanities. They will be asked to choose a VCE or VET Fast-tracking selection and their electives.

In Year 11 and 12, students are first asked to choose their preferred program - VCE, Blended VCE VM and VCE VM. They are then directed to the relevant form to choose their subjects.

Year 9 & 10 Elective Subjects

The Arts Electives

Art Making

Drama

Media

Music

Photography

Textiles

Visual Communication Design

English & Languages Electives

Japanese (All Year Elective)

Health & PE Electives

Coaching

Duke of Edinburgh Award

Empowerment through Movement (Girls only)

Exercise & Sport Science

Leadership

Outdoor Education

Sport & Personal Development (Boys only)

Humanities Electives

Business Basics

Law & Society

Myths & Legends

Oceans of the World

War & Revolution

Mathematics Electives

Cryptography

Year 10 Only Maths Extension (All Year Elective)

Science Electives

Forensic Science

STEAM and Space

Zoology

Design & Technologies Electives

Cafe Cuisine

Woodwork (Girls Only)

Woodwork

Let's Bake

Year 9 &10 Fast-Tracking & VET Subjects

The Arts Subjects

Art Making & Exhibiting

Drama

Media

Music

English & Languages Subjects

English Language

Literature (Only available to Fast-Track by invitation)

Health & PE Subjects

Health & Human Development

Outdoor & Environmental Education

Physical Education

Humanities Subjects

Business Management

Geography

Modern History

Legal Studies

Mathematics Subjects

General Mathematics

Mathematical Methods (Only available to Fast-Track by invitation)

Science Subjects

Biology

Chemistry

Physics

Psychology

Design & Technologies Subjects

Food Studies

Product & Design Technologies

VM Subjects

Vocational Maths

Personal Development Skills

Vocational Literacy

Work Related Skills

VET Subjects

VET Subjects at UYSC

Hospitality

Sport & Recreation

Rural Operations (Vineyard)

VET External - courses offered by other schools, Box Hill TAFE or Ringwood Training, (subject to confirmation), including:

Acting (Lilydale High)

Agriculture (MLMC)

Allied Health (Box Hill TAFE)

Animal Care (Lilydale High & Box Hill TAFE)

Automotive (Healesville High)

Barbering (CIRE/Inspiring Beauty)

Beauty (CIRE/Inspiring Beauty)

Building & Construction
(Healesville High or Box Hill TAFE)

Business (CIRE)

Community Services (CIRE)

Conservation & Ecosystem Management
(Lilydale Heights)

Cookery (Ranges TEC)

Dance (MLMC)

Early Childhood Education & Care (CIRE)

Electrotechnology
(Ranges TEC) (Year 11 & 12 Only)

Engineering Studies (Ranges TEC)

Equine Studies (Box Hill TAFE)

Furniture Making (Ranges TEC)

Horticulture (Ranges TEC)

IT Game Design (Ringwood Training)

IT Networking (Ringwood Training)

Land Conservation (Lilydale Heights)

Music (Billanook)

Plumbing (Box Hill TAFE)

Retail Services (CIRE)

Salon Assistant (CIRE/Inspiring Beauty)

Tourism (CIRE)

Visual Arts (MLMC)

Work Skills (CIRE)

Year 9, students choose 8 electives, 4 preferred and 4 back-up options

Year 10s choose 2 electives across the year and a Year 11 VCE Fast-tracking subject or a VET subject. You must choose either Health OR Physical Education.

Health

Develop the knowledge, understanding, and skills needed to make informed decisions about your health and wellbeing as you prepare for adulthood.

Explore topics such as chronic illness, respectful relationships, consent, nutrition, brain health, and strategies to support your physical, social, and emotional wellbeing.

Investigate the factors that influence your decisions, examine your personal values and beliefs, and identify barriers and enablers that impact healthy lifestyles.

Through inquiry, discussion, and practical learning experiences, build the confidence and skills to make positive health choices, strengthen relationships, and enhance overall wellbeing, both now and into the future.

What could this lead to?

VCE Health and Human Development

What knowledge and skills will I build?

- Positive health choices.
- Strengthen relationships.
- Enhance your overall wellbeing both now and into the future.

What else do I need to know?

One session of practical per week, focussing on movement and lifelong physical activity.

Physical Education

Develop your understanding of health, fitness, and the importance of lifelong physical activity.

Explore the benefits of regular physical activity, the dimensions of health and wellbeing, and the Australian Physical Activity Guidelines.

Learn about the components of fitness, fitness testing, training methods, and how to design and evaluate your own training program.

Engage in a variety of activities including major and minor games, invasion games, net and wall games, lifelong physical activities, and different training methods.

Build the knowledge, skills, and confidence needed to participate in physical activity and maintain a healthy, active lifestyle throughout your life.

What knowledge and skills will I build?

- Lifelong Physical activity.
- Fitness skills and components.
- Training programs.
- How the body responds to regular physical activity.

What else do I need to know?

Three sessions of practical movement and lab-based skills, and one theory lesson.

Art Making

Explore the practical and theoretical aspects of 2D and 3D art mediums.

Express yourself creatively through hands-on art making, using painting, drawing, collage, sculpture and mixed media.

Choose materials, techniques and processes, and develop artworks that reflect your interests, ideas and artistic style.

What knowledge and skills will I build?

Learn how to reflect on your art making and the artworks and practices of artists.

Gain a deeper appreciation and understanding of artistic processes and concepts.

Research artists to inspire and inform your art making while experimenting with various materials, techniques, and processes.

What else do I need to know?

Assessment consists of two practical tasks and one theory-based task.

What could this lead to?

You will be well prepared for VCE Art Making and Exhibiting, VCE Visual Communication Design, VCE Product Design, TAFE courses.

Career Pathways

Conservator, Costume Designer, Gallery or Museum Curator, Graphic Designer, Illustrator, Industrial Designer, Interior Designer, Multimedia Artist, Painter, Advertising and Marketing Designer, Set and Exhibition Designer.

Drama

Engage in games and practical activities to develop your knowledge and control of emotions, physicality, and performance skills to communicate effectively.

What knowledge and skills will I build?

Use the skills developed during your studies to devise performances based on set stimulus, and use the space and objects around you to create performance.

Maintain a drama logbook for literacy tasks and keep a record of group work, such as devising and rehearsal.

What else do I need to know?

This elective involves performing in front of peers, staff and the school community.

What could this lead to?

VCE Drama, VCE Theatre Studies, VET Acting (Screen)

Career Pathways

Stage/Screen Actor, Creative Leadership, Radio & Podcasting, Stage Manager, Lighting or Sound Designer, Casting Director, Producer, Theatre Venue Manager, Drama/Theatre Teacher or Coach.

Media

Explore film, television, video, print, radio and multimedia via a series of practical exercises and selected theory topics.

Understand the role the media plays in your daily life.

Create your own high quality media products.

What knowledge and skills will I build?

- Develop an understanding of production elements and roles in production through the creation of a short film.
- Participate in critical discussions about feature films, complete detailed media reviews and analyse how different media operate in different cultures.

What else do I need to know?

Audio and Visual Equipment can be provided, students with a mobile device are encouraged.

What could this lead to?

VCE Media, VET Creative & Digital Media

Career Pathways

Film, TV & Audio Production, Journalism & Publishing, Content Creator, Project Management, Digital Content & Marketing, Public Relations & Communications, Social Media Manager.

Music

Learn to play, perform, create, and explore the music you love!

Whether you're already a musician or just curious to try something new, Music helps you build confidence, creativity, and teamwork skills while having fun with friends.

What knowledge and skills will I build?

- Develop your performance skills on an instrument or as a vocalist.
- Learn how to create and compose your own music.
- Build confidence performing and working with others in groups.
- Explore different musical styles, genres, and cultures.
- Improve your listening, analysis, and critical thinking skills through music.

What else do I need to know?

Includes practical-based learning and theory.

What could this lead to?

VCE Music, TAFE courses

Career Pathways

Performing as a musician, singer, or songwriter, Music production, sound engineering, and recording technology, Arts, entertainment, and event management careers, Teaching, community arts, and creative industries roles.

Photography

Improve your photographic skills so all of your images are as strong as possible!

Learn about film photography, developing and printing, as well as digital photography techniques.

What knowledge and skills will I build?

- Composition techniques.
- Use 35mm film and SLR cameras.
- Use Digital SLR cameras.
- Manual exposure techniques.
- The history of photography.
- The work of key photographers.
- Alternative processes.

What could this lead to?

VCE Art Making and Exhibiting, VCE Media, VET Creative and Digital Media

Career Pathways

Photographer, Social Media Management, Journalism, Content Creation, Marketing

What else do I need to know?

This elective includes practical-based learning as well as theory. You will need a phone to use in class. You will complete work individually and in groups.

Textiles

Do you have creative flair and a passion for style?

Ever wanted to design your own clothes or create something totally unique?

In Textiles, you'll get hands-on with sewing machines, fabrics, and creative design to bring your ideas to life.

You'll learn about fabric selection, sewing techniques, repairs, alterations and design planning, while exploring how fashion connects to identity, trends, and sustainability.

Whether you're a beginner or already love being creative, Textiles gives you the chance to experiment, build confidence, and create something you can be proud of.

What could this lead to?

VCE Media, VET Creative & Digital Media

Career Pathways

Sewing Machinist Assistant, Textile Production Worker, Fashion or Apparel Assistant, Retail or Studio Assistant (Fashion/Textiles), Costume or Wardrobe Assistant, Fashion designer, Design Assistant, Pattern Maker, Production Assistant Stylist, Fashion Buyer.

What knowledge and skills will I build?

- Basic sewing techniques - machine and hand sewing.
- Garment construction.
- Fashion history.
- Sustainability.

What else do I need to know?

Folio-based elective. Includes practical and theory components.

Visual Communication Design

Do you love drawing and designing?

Explore and develop your ability to communicate ideas visually through the design process.

Use elements and principles of design, manual and digital methods, and industry-informed practices.

Generate, develop and refine design solutions in response to briefs.

What knowledge and skills will I build?

- Learning how to collect and document research and inspiration.
- Exploring idea generation and development.
- Application of elements and principles.
- Testing and refining ideas.
- Creating final presentations and evaluations.

What else do I need to know?

VCD is a practical and Folio-based subject.

What could this lead to?

VCE Art Making and Exhibiting, VCE Media, VET Creative and Digital Media

Career Pathways

Graphic Designer, Illustrator, Architect, Interior Designer, Industrial/Product Designer, Fashion Designer, Animator, Game Designer, Web Designer, Advertising and Marketing Designer, Set and Exhibition Designer.

Japanese

Look beyond your own culture and explore the ancient world of Japan. It's language and culture are amazing!

Learn how to communicate in another language, order food, ask how much it is, make comparisons and ask directions.

Cook Japanese food, especially Gyoza dumplings, Okonomiyaki and other things such as make your own sushi rolls. Come and Join!

Learning another language and the culture of a country enables a better understanding of our own culture, language and history.

What could this lead to?

Work for an International company like Sony, Nintendo, and Toyota, work as a diplomat or work for the Australian Embassy in Japan, employed in the armed forces as a language expert.

Career Pathways

Work for an International company like Sony, Nintendo, and Toyota, work as a diplomat or work for the Australian Embassy in Japan, employed in the armed forces as a language expert.

What knowledge and skills will I build?

Through anime and other media:

- Improve your knowledge of Hiragana, Katakana & Kanji.
- Learn how to make requests in Japanese.
- Learn the past and present tense of verbs and adjectives.
- Learn more about how particles work in order to give meaning to sentences.

What else do I need to know?

You will have the opportunity to go on tours to Japan, and excursions to Taiko drumming and Japanese restaurants.

You may also visit the Japanese Festival at Box Hill Town Hall to view traditional performing arts and eat authentic Japanese food.

Coaching

Explore the skills needed to become a coach by practising and evaluating different coaching styles.

Learn about umpiring and the rules of different sports.

Participate in a variety of team sports, and develop strategies and tactics designed to improve your skills and ability levels, with a strong focus on coaching.

What knowledge and skills will I build?

- Learning about biomechanics and how to improve players skills through biomechanics principles.
- Learn about different coaching styles.
- Learn about how to develop your own coaching skills.
- Explore umpiring skills.

What else do I need to know?

This elective is a mix of theory and practical elements.

What could this lead to?

VCE Physical Education, VCE Health and Human Development, VET Sport and Recreation

Career Pathways

Sports Coach, PE Teacher, Community Sports Coordinator, Strength and Conditioning Coach, Personal Trainer, Sports Development Officer, Umpire or Referee

Duke of Edinburgh

- Design your own Award program.
- Set your own goals and record your progress.
- Make a positive impact on the lives of others through community service. Learn valuable practical and social skills for career development.
- Take on the challenge of an adventurous journey.
- Connect with other Award participants both in Australia and around the world.

Continue with activities you already doing, such as sports or volunteering, and count these towards achieving your Award, or use your Award as an opportunity to try something new and develop a passion for something different.

There are no limits to what you can achieve!

What could this lead to?

Leads to any VCE and VCE VM subject.

Career Pathways

Community Development Officer, Youth Worker, Outdoor Education Instructor, Project Manager, Sports and Recreation Officer.

> ***'Participation in The Duke of Edinburgh's International Award Australia is widely recognised by employers and universities.'***

What knowledge and skills will I build?

- Learn about setting SMART goals.
- Explore your own pathways and experience student choice.
- Leadership skills.
- Learn how to plan and conduct an adventurous journey.
- Explore voluntary service in the local community.

What else do I need to know?

This elective aims to build your interpersonal skills, self-belief and personal goals.

Empowerment Through Movement (Girls only)

Explore fitness, sport, wellness, and self-confidence in a supportive and empowering environment.

It is more than just physical activity; it is also about holistic wellbeing.

Through exercises, sports, and activities, learn how to cultivate a positive body image, build your self-esteem, and gain a sense of sisterhood with other participants.

It will be a space where you feel comfortable pushing your boundaries, trying new things, and embracing your strengths.

Engage in a diverse range of activities, including team sports, strength training, and yoga and learn about nutrition, body positivity, stress management, and healthy relationships.

What knowledge and skills will I build?

- Explore women's health.
- Planning physical activity and empowering others.
- Exploring physical activity outside of traditional sports.
- Leadership skills.

What else do I need to know?

This is a theory and practical subject

What could this lead to?

VCE Health and Human Development, VCE Physical Education

Career Pathways

Personal Trainer, Fitness Instructor, Health Promotion Officer, Yoga Instructor, Sports Coach

Exercise and Sport Science

Exercise and Sports Science focuses on how you can integrate exercise and physical activity into sports performance, injury prevention and rehabilitation.

Explore the human body systems and strengthen your understanding of how your musculoskeletal and cardiorespiratory systems work together to improve sporting performance.

What knowledge and skills will I build?

- Learning about sports nutrition.
- Exploring exercise physiology.
- Learning about human anatomy and how the body moves.

What else do I need to know?

This elective is a mix of theoretical classroom learning and practical sessions.

What could this lead to?

VCE Physical Education

Career Pathways

Exercise Scientist, Sports Coach or High-Performance Coach, Personal Trainer, Strength and Conditioning Coach, Physiotherapist, Sports Trainer, Exercise Physiologist, PE Teacher

Leadership

Leadership is entirely student-focused and student-driven.

You are responsible for directing the program and making decisions regarding your role, partnerships, assessment, and reporting procedures.

The program is specifically designed to encourage you to take responsibility for the direction and growth of your learning and is based around the Advance Program from the Department of Human Services Victoria.

What knowledge and skills will I build?

- Learning about leadership principles.
- Skills in engaging with the local community.
- Exploring positive leaders.

What else do I need to know?

This elective involves you making choices and having a say in the learning direction of the class.

What could this lead to?

Leads to any VCE and VCE VM subject.

Career Pathways

Teacher, Community Development Officer, Project Manager, Youth Worker, Human Resources Officer

Outdoor Education

Develop your awareness of the outdoor environment and how you use it:

- Practical outdoor skills
- Planning and conducting a safe and sustainable outdoor trip
- Exploring leadership skills

Explore sustainability, minimal impact strategies, risk-taking, and safety in the outdoors!

Take part in classroom team-building and leadership activities!

Develop your knowledge in the classroom, and gain a deeper understanding through expeditions and outdoor experiences like bush walking, navigation, surfing, and canoeing.

Gain knowledge through participation in rock climbing, hiking and high ropes activities.

What could this lead to?

VCE Outdoor and Environmental Studies

Career Pathways

Outdoor Education Teacher, Outdoor Adventure Guide, Parks and Wildlife Ranger, Adventure Tourism Operator, Youth Development Officer

What knowledge and skills will I build?

- Teamwork and leadership skills.
- Problem-solving skills and resilience.
- Camping and recreational skills.
- Independent skills.

What else do I need to know?

Participation in all practical outdoor activities including camps, is compulsory.

Sport and Personal Development (Boys only)

Challenge yourself, build camaraderie, and unlock your full potential through physical activity!

It is not just about fitness; your personal development and teamwork will be just as important.

In a supportive environment, push your limits, develop resilience, and make meaningful connections with your peers.

Participate in activities designed to build your strength, endurance, and agility.

From traditional sports like basketball, soccer, and football, to strength training, obstacle courses, and outdoor adventures, there is something for you!

As well as physical challenges, take part in discussions on topics such as leadership, sportsmanship, goal setting, and healthy masculinity.

What could this lead to?

VCE Physical Education and VET Sport and Recreation

Career Pathways

Strength and Conditioning Coach, PE Teacher, Sports Coach, Personal Trainer, Youth Development Officer.

What knowledge and skills will I build?

- Learn about wellbeing and healthy masculinity
- Physical and mental health skills
- How to design a physical health plan

What else do I need to know?

Theory and practical classes.

Business Basics

Explore how businesses are created, structured, and operated in the real world.

Through engaging case studies and practical examples, investigate what it takes for a business to succeed, including finance, management, and marketing strategies.

Bring your ideas to life by developing your own business concept and constructing a detailed business plan that reflects real-world entrepreneurial thinking.

What knowledge and skills will I build?

- Explore different types of business structures using real-world examples and case studies.
- Understand what makes a business successful in competitive markets.
- Investigate sources of finance for small businesses.
- Examine business management styles and effective leadership approaches.
- Develop understanding of communication and teamwork in business settings.
- Learn how market research is used to identify customer needs and trends.
- Design and evaluate marketing strategies and campaigns.
- Create and develop a complete business plan for a new or imagined business

What could this lead to?

VCE Business Management

Career Pathways

Entrepreneurship, Small Business Ownership, Marketing, Administration, Human Resources, Accounting

What else do I need to know?

You will work with real life case studies and apply your understanding to your own business ideas.

Law & Society

Step into the world of power, justice, and human rights, as you uncover how Australia's political and legal systems shape everyday life.

From courtroom trials and changing laws, to debates about government and the protection of human rights, this subject challenges you to think critically about the world around you.

If you enjoy discussing real-world issues, exploring how societies change, and understanding how decisions impact people, this is for you!

What could this lead to?

VCE Legal Studies

Career Pathways

Lawyer, Police Officer, Detective, Judge, Criminologist, Political Commentator, Social Worker.

What knowledge and skills will I build?

- Understand how Australia's political and legal systems operate
- Explore different types of laws and how they are applied
- Investigate how courtrooms function and the roles within the legal system
- Examine why laws change over time in response to society and technology
- Evaluate challenges and issues within the legal system
- Compare Australia's system of government with other political systems
- Develop an understanding of human rights and their importance in society
- Investigate historical and contemporary human rights issues
- Build critical thinking, research, discussion, and evaluation skills

What else do I need to know?

You will be unpacking real-life legal cases to understand the legal system in Australia and around the world.

Myths and Legends

Step into a world of ancient gods, magical creatures, legendary heroes, and mysterious beliefs in Myths and Legends!

Explore fascinating stories across history, from the legend of King Arthur and ancient creation myths to pirates, mermaids, goblins, elves, and witchcraft.

Through films, artefacts, images, and historical sources, uncover how myths have shaped cultures, influenced historical events, and continue to impact the modern world today.

Career Pathways

Historian, Novelist, Teacher, Museum Work

What knowledge and skills will I build?

- Investigate famous myths, legends, and belief systems from different cultures and time periods.
- Explore topics such as creation myths, King Arthur, witchcraft, mythical creatures, pirates, mermaids, goblins, elves, and fairies.
- Analyse representations of myths in films, artworks, written texts, and historical artefacts.
- Compare fictional portrayals with historical evidence and real events.
- Conduct research using a variety of historical and modern sources.
- Develop inquiry and investigation skills through a topic of personal interest.
- Examine how myths and legends continue to influence modern society, culture, and beliefs.
- Strengthen source analysis, critical thinking, and communication skills.

What else do I need to know?

This elective is ideal for students who enjoy history, storytelling, fantasy worlds, popular culture, research, and creative thinking.

Oceans of the World

Did you know about 70 percent of the Earth's surface is covered by water?

Did you know that nearly 97 percent of that water is the saltwater swirling around in the world's oceans!

Oceans of the World is an exciting elective that looks at everything in ocean environments.

What knowledge and skills will I build?

- You will investigate weather patterns, and the rise in sea levels, focusing on melting glaciers and ice sheets.
- You will learn about ocean ecosystems, marine animals and the coral reefs of the world and how climate change and pollution are impacting marine life.
- You will study the sea floor and look at geological oceanography specifically focusing on volcanoes, earthquakes and tsunamis.

Career Pathways

Marine biologist, Oceanographer, Environmental Scientist, Aquarium Educator

What else do I need to know?

This elective includes an excursion to a coastal park and the Melbourne Aquarium.

War & Revolution

Explore the revolutions, wars, and social movements that have reshaped the modern world.

Travel through some of the most dramatic turning points in history from 1500 to the present day,

Investigate major events such as the French and Russian Revolutions, powerful struggles like women's suffrage and the abolition of slavery.

Examine a modern conflict chosen by your class.

This elective brings history to life through inquiry, debate, and a creative museum-style project where you showcase your own historical investigation.

What could this lead to?

VCE History: Revolutions

Career Pathways

Teaching, Historian, Museum Work, Writing, Humanitarian Work

What knowledge and skills will I build?

- Study major historical turning points from 1500 to the present.
- Investigate political revolutions such as the French Revolution (1789) and Russian Revolution (1917).
- Examine key figures including Napoleon, Lenin, and other influential leaders.
- Analyse social revolutions including women's suffrage and the abolition of slavery in the United States.
- Explore the causes, events, and consequences of major wars and revolutions.
- Investigate modern conflicts such as the Vietnam War, Cuban Missile Crisis, Arab-Israeli Conflict, Rwandan Genocide, or Yugoslav Wars.
- Develop historical inquiry skills through independent and class-based research.
- Analyse sources and perspectives from different time periods and viewpoints.
- Complete a museum-style inquiry project on a historical topic of choice spanning 500 years.
- Strengthen skills in critical thinking, evidence analysis, communication, and creative presentation.

What else do I need to know?

This elective is for students interested in understanding global issues, how societies change over time, and how past events shape the modern world.

Cryptography

Do you love puzzles, escape rooms, strategy games, or just want to know how to keep a secret completely uncrackable?

Ever wanted to send a message that absolutely no one else could read? Or eavesdrop on a secret conversation and totally shatter its security?

Step into the shoes of history's greatest spies, military masterminds, and digital hackers.

Every week, learn a new code, master how to encrypt your own messages, and use logic and patterns to ruthlessly crack your classmates' secrets!

This isn't a class where you sit back and take notes—it's a hands-on, semester-long battle of wits!

What knowledge and skills will I build?

- **Master Ancient Ciphers:** Use the exact methods Julius Caesar used to command his empires.
- **Break the Unbreakable:** Hunt for hidden patterns to smash complex codes without being given the key.
- **Go Behind Enemy Lines:** Learn how Alan Turing and a team of eccentric geniuses cracked the infamous German Enigma machine and shortened World War II.
- **Control the Modern Internet:** Discover how massive prime numbers and "clock math" protect your passwords, video games, and messages today.

What could this lead to?

VCE Mathematics, VCE Mathematical Methods, Specialist Mathematics, Physics, Chemistry

Career Pathways

Computer Science, Computer Engineering, Cryptologic Engineer, Cybersecurity Architect, Cryptanalyst, Blockchain Security Specialist.

What else do I need to know?

The semester culminates in The Ultimate Cipher War—a live, competitive team tournament where you will design a secure communication network and try to intercept and hack into enemy team systems.

Year 10 Extension Maths (Year-long)

Are you looking to challenge yourself mathematically and set a rock-solid foundation for senior secondary school?

Mathematics Extension is a rigorous, fast-paced course specifically designed for students intending to pursue Mathematical Methods (Units 1-4) in Years 11 and 12.

What knowledge and skills will I build?

- Learn advanced algebraic fluency, functions, and spatial reasoning, focusing on:
- Advanced arithmetic and algebra.
- Irrational numbers and surds.
- Coordinate geometry.
- Trigonometry.
- Graphing a wide range of function.
- Applying these skills to real-life scenarios.

What could this lead to?

This elective is for students who intend to study VCE Mathematical Methods. It will also benefit students who want to attain high marks in VCE General Mathematics.

Career Pathways

Studying mathematics and statistics prepares you for a wide variety of careers because it provides you with the problem solving, computing and communication skills that employers want.

Forensic Science

Step into the fascinating world of forensic science, where science meets crime solving.

Investigate how forensic scientists gather, analyse, and present evidence using techniques such as DNA profiling, document analysis, toxicology, pathology, and anthropology.

Explore real-world cases, examine the reliability of eyewitness testimony and human memory, and develop the skills needed to think critically, analyse evidence, and solve mysteries like a real forensic investigator.

What knowledge and skills will I build?

- Analysing and interpreting forensic evidence such as DNA, fingerprints, fibres, documents, and other trace evidence from crime scenes.
- Developing scientific inquiry skills by collecting evidence, identifying patterns, and formulating evidence-based conclusions.
- Critically evaluating the reliability and validity of forensic testing methods and eyewitness testimony, including the role of human memory.
- Applying problem-solving and analytical thinking skills to investigate and evaluate real-world forensic cases.

What could this lead to?

VCE Psychology, Biology, Chemistry, Legal Studies

Career Pathways

Forensic science, Criminology, Criminal psychology, Policing, Detective work, Law, Pathology, Scientific research

What else do I need to know?

- Includes hands-on practical activities, crime scene investigations, and analysis of real forensic evidence.
- Explore real-world cases through case studies and documentaries focused on forensic science and criminal investigations.
- Opportunity to attend an excursion to the Yarra Ranges Tech School to participate in forensic science learning experiences and workshops.

STEAM & Space

Ever wanted to launch your own rocket?

Ever wonder how astronauts get to space or what's really out there among the stars?

Dive into the exciting world of physics and astronomy - you'll be building, designing, experimenting, and exploring!

If you have a curious mind, love to ask questions, solve problems, and get hands-on; whether you're into science, engineering, art, or just love space, there's something for you.

What knowledge and skills will I build?

- Designing, building, and launching rockets.
- Learning about space, planets, and stars.
- Exploring the science of flight and how spacecraft work.
- Finding out how different cultures told stories about the stars.
- Creating your own constellation stories and space-themed art.

What else do I need to know?

This elective has practical and theory-based content, along with an extended investigation.

What could this lead to?

VCE Physics, VCE Mathematics, VCE Product Design and Technologies

Career Pathways

Astronomy, Science, Engineering

Zoology

Get WILD by studying incredible animals of the world and how we can protect them!

Investigate marine species, making models of animal enclosures, observing animals and conducting surveys in the wild.

What knowledge and skills will I build?

- Learning about conservation of animals.
- Exploring the diversity and adaptations of animals.
- Conducting animal surveys.

What could this lead to?

VCE Biology, a degree in Zoology, TAFE Vet and Animal Care Course.

Career Pathways

Resource management, Conservationist, Zookeeper, Aquarist, Biosecurity.

What else do I need to know?

Includes practical-based learning such as surveys and a theory component with particular emphasis on conservation. Includes an excursion.

Cafe Cuisine

Interested in working in hospitality or just making and enjoying foods that you would find in a café?

Café cuisine has both a practical and theory component, which will enable you to develop a wide range of knowledge and skills in contemporary food preparation working individually and as part of a team.

It focuses on popular sweet and savoury foods currently served in cafés, featuring foods from cuisines around the world.

What knowledge and skills will I build?

Develop practical skills in safely preparing and presenting food, selection and use of appropriate ingredients, cooking methods and equipment, while focusing on the design process.

What else do I need to know?

This elective has a practical and theory component and may include an excursion.

What could this lead to?

This course could lead you into the Certificate 2 in Hospitality that currently runs at Upper Yarra Secondary College, VCE Food Studies, TAFE Certificates in Cooking and Baking.

Career Pathways

Working in Hospitality front and back of house, ranging from serving customers to running a kitchen, Food Technologist, Food Scientist, Product Developer, or Quality Control Officer, Professional Chef, Baker, Patisserie Chef, or Caterer, Food Stylist, Food Photographer, Food Journalist, or Consumer Advisor.

Woodwork (Girls Only)

Ditch the pressure of a mixed workshop and build something entirely your own in a space designed just for you.

From mastering machinery to bringing your own designs to life, it's all about building confidence, making messes, and proving that the best craftsmen are often craftswomen.

What knowledge and skills will I build?

- Learning about timber, its properties and how to chose the right one for the job.
- Exploring the design and production process that designers undertake, focusing on the "problem" and "solution" model diamond model.
- Finding out about women working in design and constructions fields.
- Learning how to use the tools in the workshop to apply different joinery and construction methods.
- Designing and creating your own products which may include cheeseboards, trinket boxes, pot plant stands, stools, **cooking utensil.**
- Learning how to analyse existing products.
- Developing design concepts through 2D and 3D drawing techniques.

What could this lead to?

VCE Product Design Technologies - Wood, TAFE courses in Construction, Building and Design

Career Pathways

Industrial Design, Product Design, Interior Design, Engineering, Project Management, Architectural Design, Cabinetmaking, Furniture Making, Building and Construction.

What else do I need to know?

Includes hands-on learning as well as theory lessons and technical drawing.

Woodwork (Mixed)

Learn about the product design process, focusing on the 'Problem' and 'Solution' that designers go through to develop products.

Study the characteristics and properties of materials.

Learn about the impacts of technology on society and the sustainability of products.

What knowledge and skills will I build?

- Writing design briefs and using the Double Diamond process.
- Using inspiration images to research existing products.
- Analysing existing products.
- Applying different joinery and construction methods.
- Understanding different materials.
- Writing evaluation reports and developing design.
- 2D and 3D drawing techniques (Isometric and Orthogonal).
- Safe work practices are also a main focus as you will be exposed to a wide range of tools, equipment and machinery.

What could this lead to?

VCE Design Technologies - Wood Studies, TAFE courses in Construction, Building and Design

Career Pathways

Industrial Design, Product Design, Interior Design, Engineering, Project Management, Architectural Design, Cabinetmaking, Furniture Making, Building and Construction.

What else do I need to know?

Includes hands-on learning as well as a theory lessons and technical drawing.

Let's Bake!

The focus is on baking a variety of sweet and savoury food products.

You will develop skills in a variety of baking techniques, from baking bread, pastries, cakes, slices and biscuits to savoury food products including pies and quiches.

•

What knowledge and skills will I build?

- Researching and planning recipes of your choice.
- Learning and experimenting a range of baking techniques and methods of cookery.
- Experimenting with a range of decorating and presentation techniques.
- Preservation of food.

What could this lead to?

VCE Food Studies, TAFE Certificates in Cooking and Baking

Career Pathways

Food Technologist, Food Scientist, Product Developer, or Quality Control Officer., Professional Chef, Baker, Patisserie Chef, or Caterer, Food Stylist, Food Photographer, Food Journalist, or Consumer Advisor.

What else do I need to know?

Let's Bake! includes practical based learning and theory components.

UPPER YARRA
SECONDARY COLLEGE

81 - 89 Little Yarra Road, Yarra Junction, Victoria 3797
P (03) 5967 1877 E upper.yarra.sc@education.vic.gov.au www.uysc.vic.edu.au