The Grange
P-12 COLLEGE

The Grange P-12 College

SPORTS SCIENCE ACADEMY

2023 Subject Selection Handbook

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Sports Science Academy Subject Selection Handbook

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The Grange P-12 College is accredited under the Department of Education and Training's CRICOS registration (CRICOS provider name and code: Department of Education and Training, 00861K).

Years 7-12 Sports Science Academy
2023 Subject Selection Handbook

CONTENTS

Introduction

The Grange P-12 College is committed to building strong personal and learning skills to assist all students with current and future studies and career pathways of their first choice.

Each subject selection handbook (Years 7 – 9, Years 10 – 12 and Sports Science Academy) contains a comprehensive outline of curriculum areas and subject offerings at The Grange P-12 College.

The handbooks are arranged in the following ways:

Years 7 – 9: Outlines the core subjects that students will complete throughout the year across each discipline in line with the Victorian Curriculum. At the year 9 level, students are presented with a range of core (compulsory) and elective subjects. The elective subjects are designed to provide students with a range of experiences that may lead to further specialisation during later years of study.

Years 10 - 12: Year 10 students are presented with a range of core (compulsory) and elective subjects. The elective subjects are intended to provide students with a range of experiences that may lead to further specialisation during the later years of study. Some Year 10 students may also be engaged in the early commencement program that sees them complete a VCE Unit 1 and 2. The Year 11 and 12 sections contain information about the Victorian Certificate of Education (VCE), The Victorian Certificate of Education – Vocational Major (VM), Victorian Pathways Certificate (VPC) and Vocational Education and Training (VET) studies for students. Parents and students are encouraged to select combinations of subjects that lead to their intended career and post – compulsory studies at tertiary institutions.

Sports Science Academy (SSA): Outlines the specific learning pathway for students from Year 4 through to their later years of studies in the Victorian Certificate of Education (VCE), The Victorian Certificate of Education – Vocational Major (VM), Victorian Pathways Certificate (VPC) and Vocational Education and Training (VET). The Subject Selection Handbook clearly outlines the core subjects that students complete in line with the Victorian Curriculum as well as semester and elective subjects which are designed to further enrich student learning and understanding of key concepts associated with Sports Science studies.

When selecting subjects and programs of study leading into the later years it is critical that students have formed a general idea of what career options are available beyond formal schooling. The College has well-developed programs that expose students to pathway options and staff who will assist with advice about appropriate courses to suit interests, aspirations and learning strengths.

Please note that the full suite of subjects and elective programs from Years 10-12 are not presented in this handbook. This handbook shows the distinct learning pathway within the Sports Science Academy. All subject offerings are found in the Year 10-12 Handbook and subject to availability and demand from students.

Selecting a Year Level program does not guarantee promotion to that Year Level. This will be dependent upon meeting assessment standards and the College's attendance requirements.

YEAR 4 – YEAR 12

Sports Science Academy

Sports Science at The Grange P-12 College is a select entry program that pursues the academic ability of students through a sporting lens. The program builds the capacities of students as they participate in and around sporting environments in a variety of different roles.

Sports Science Academy (SSA) Student Athletes are involved in a specialised learning program whereby theoretical and practical sessions are embedded in their day-to-day schooling. Specifically, throughout their practical training, students develop skills that are transferrable to their sport of choice via Gymnastics at the Callistemon Campus, Strength and Conditioning and Sport Specific Skill and Development sessions at the Deloraine Campus.

Learning Pathways

This is a highly specialised sub-school program with a strong learning pathway from Year 4 through to Year 12. The Academy is designed to complement students' learning styles and aspirations after Year 12; whether it be a University Degree or Apprenticeship/Traineeship in the Sporting Industry. We ensure our Student Athletes are exposed to a variety of experiences. Students combine an academic program together with key studies and training within the sports environment. The specific Sports Science Academy pathways and compulsory subjects from Year 4 are outlined below and throughout this Subject Selection Handbook.

Whilst there is a focus on sporting skill development, this program continues to require all students to complete formal academic studies in core subjects of Mathematics, English, Science, Humanities, Health and Phys Ed.
It is vital that students within the SSA stream develop academic skills, as we have agreed relationships with both Victoria University and Deakin University where students will have the opportunity to transition into University/Tertiary level studies such as Physiology, Biomechanics, Physical Education Teaching and Exercise Science.

The Wholistic Development of a Student Athlete

The Sport Science Academy is complimented by its own supportive Leadership team that will see your child through their entire schooling. The program has a strong Wellbeing team where highly individualised mentoring, coaching, life skills and psychology associated with a sports mindset are developed.

Student Athletes are given specific opportunities to help them to understand the various aspects within the sporting industry including high profile guest speakers and coaching opportunities from industry experts. Sports Science exclusive excursions are also used to help challenge students and develop teamwork, communication skills and transfer theoretical skills into practical settings.

Enrolment Process

Prospective Student Athletes are required to sit both physical and academic competency testing and provide a reference from their current sporting coach. Students are required to apply annually to be involved in the Academy program, with acceptance in one year, not guaranteeing future positions. All students who are successful in the application process wear a specialised Sports Science Academy uniform to ensure they are always ready for physical activity opportunities.

Year 4

Year 4 Curriculum

The Year 4 curriculum is designed to provide students with a comprehensive range of subjects based on the Victorian Curriculum F–10, which incorporates the Australian Curriculum and reflects Victorian priorities and standards. The curriculum is the common set of knowledge and skills required by all students for life-long learning, social development, active and informed citizenship. The Sports Science Academy program is also offered at this level to further enrich and address diverse student needs.

During Year 4, the Sports Science Academy builds the high expectations, commitment and academic output that is required of student athletes and they begin to discover Inquiry Based learning. The curriculum design mirrors that of Mainstream Year 4, however with an additional Physical Education session to further develop the sporting potential, mindset and tactical awareness in game play.

The following subjects are completed as part of the Year 4 Curriculum:

Core Subjects	Specialist Subjects (semester and yearly)
English	STEM (yearly)
Maths	Art (semester)
Inquiry	Hindi (semester)
	Physical Education (yearly)
	Athlete Development Program (ADP) (yearly)

What will I Learn?

- To be an independent learner
- To ask questions and explore ideas
- To speak confidently in front of others
- To work as part of a team
- Correct movement techniques through gymnastics
- Game sense scenario training
- Tactical awareness strategies

What types of things will I do?

- Design and deliver inquiry projects with others and Independently
- Work cooperatively with peers in a variety of situations
- Thorough skill-based training in a variety of sports
- Hear from professional athletes as guest speakers
- Share knowledge with others through presentations
- Partnership sporting and mentoring programs
- Extra ADP session as a single class

Year 5

Year 5 Curriculum

The Year 5 curriculum is designed to provide students with a comprehensive range of subjects based on the Victorian Curriculum F–10, which incorporates the Australian Curriculum and reflects Victorian priorities and standards. The curriculum is the common set of knowledge and skills required by all students for life-long learning, social development, active and informed citizenship. The Sports Science Academy program is also offered at this level to further enrich and address diverse student needs.

To complement our Inquiry based model of curriculum, students will also develop their ability as student athletes through extra programs that target their physical skills, game knowledge, leadership capacity and mindset.

The following subjects are completed as part of the Year 5 Curriculum:

Core Subjects	Specialist Subjects (semester and yearly)
English	STEM (yearly)
Maths	Art (semester)
Inquiry	Hindi (semester)
	Physical Education (yearly)
	Athlete Development Program (ADP) and Food Technology (yearly)

What will I Learn?

- To be an independent learner
- To ask questions and explore ideas
- To speak confidently in front of others
- To work as part of a team
- Correct movement techniques through gymnastics
- Game sense scenario training
- Tactical awareness strategies

What types of things will I do?

- Design and deliver inquiry projects with other and independently
- Work cooperatively with peers in a variety of situations
- Thorough skill-based training in a variety of sports
- Hear from professional athletes as guest speakers
- Complete a unit of Nutrition and Cooking at the Deloraine Campus
- Share knowledge with others through presentations
- Partnership sporting and mentoring programs
- Extra ADP session as a single class
- Participate in Interschool Sport

Year 6

Year 6 Curriculum

The Year 6 curriculum is designed to provide students with a comprehensive range of subjects based on the Victorian Curriculum F–10, which incorporates the Australian Curriculum and reflects Victorian priorities and standards. The curriculum is the common set of knowledge and skills required by all students for life-long learning, social development, active and informed citizenship. The Sports Science Academy program is also offered at this level to further enrich and address diverse student needs.

To complement our Inquiry based model of curriculum, students will also develop their ability as student athletes through extra programs that target their physical skills, game knowledge, leadership capacity and mindset.

The following subjects are completed as part of the Year 6 Curriculum:

Core Subjects	Specialist Subjects (semester and yearly)
English	Physical Education (yearly)
Maths	Art (semester)
Inquiry	Hindi (semester)
	Athlete Development Program (ADP) and Food Technology (yearly)

What will I Learn?

- To be an independent learner
- To ask questions and explore ideas
- To speak confidently in front of others
- To work as part of a team and build leadership skills
- Tactical awareness strategies
- Correct movement techniques through body weight movements in strength, conditioning and gymnastics
- Game sense scenario training

What types of things will I do?

- Design and deliver inquiry projects with others and Independently
- Work cooperatively with peers in a variety of situations
- Thorough skill-based training in a variety of sports
- Hear from professional athletes as guest speakers
- Share knowledge with others through presentations
- Partnership sporting and mentoring programs
- Extra ADP session as a single class

Year 7

Year 7 Curriculum

The Year 7 curriculum is designed to provide students with a comprehensive range of subjects based on the Victorian Curriculum F–10, which incorporates the Australian Curriculum and reflects Victorian priorities and standards. The curriculum is the common set of knowledge and skills required by all students for life-long learning, social development, active and informed citizenship. The Sports Science Academy program is also offered at this level to further enrich and address diverse student needs.

It should be noted that Hindi is provided to students in the Sports Science Academy through an embedded and immersive curriculum whereby subjects of Food Studies, Art and Humanities incorporate elements of the Indian culture into their programs. In addition, students experience Hindi culture through incursion and excursions which are tailored to engage Student Athletes.

Learning Options available at Year 7

Core Subjects	Sessions per week	Sports Science	Sessions per week
English	6	English	6
Maths	6	Maths	6
Science	4	Science	4
Humanities	3	Humanities	3
Health & Phys Ed	3	Health & Phys Ed	3
Hindi	2	Sports Science	5
Art	2	Art – Semester	3
Food Studies – Semester	2	Food Studies – Semester	3
Drama – Semester	2		
Vis. Com. – Semester	2		
Music – Semester	2		

CORE

YEAR 7

English

In Year 7, students communicate with peers, teachers, individuals, groups and community members in a range of settings. Students engage with a variety of texts individually, in small book clubs, and as a class. They listen to, read, view, interpret, evaluate and perform a range of spoken, written and visual texts. Students create a range of imaginative, informative and persuasive texts as they develop their writing skills.

What will I Learn?

- Skills for discussing increasingly complex issues and ideas from a variety of sources.
- Creative, persuasive, informative and text analysis writing.
- Debating and public speaking skills.
- Collaborative communication skills.
- Spelling, punctuation, grammar and vocabulary extension.
- ICT creating and editing tools.

What types of things will I do?

- Reading and Viewing
- Oral presentations
- Analysing texts
- Writing
- Speaking and Listening
- Extended writing tasks
- Film Study
- Group discussions

Where can this lead me?

Career Outcomes	Course Pathways
° Journalism, media ° Publishing ° Creative Writing ° Professional Writing and Editing ° Advertising and Marketing ° Government and Public Service	English is a prerequisite for all future studies.

CORE

YEAR 7

Maths

The Year 7 Mathematics Curriculum is built around creating opportunities and enriching the lives of all students. Mathematics develops the mathematical capabilities that all students need in many aspects of their lives and provides the fundamentals on which mathematical specialities and professional applications of mathematics are built.
Students engage with the Victorian Curriculum via inspiring, interesting, relevant and professionally taught lessons employed specifically to increase student capacity and confidence in mathematical ideas and concepts.
Students also participate in a mathematics program called Scaffolding Numeracy in the Middle Years (SNMY). SNMY leads students through levelled activities of mathematical understanding.

What will I Learn?

Students study patterns, skill applications and concepts within three Key Strands:

- Number and Algebra
- Measurement and Geometry
- Statistics and Probability

Students' progress through eight levels during Scaffolding Numeracy in the Middle Years.

What types of things will I do?

- Reading
- Writing
- Applying
- Consolidating
- Discussing
- Thinking
- Investigating
- Enjoying Mathematics
- Problem Solving
- Calculating
- Challenging Mathematical concepts

The program at The Grange P-12 College will provide opportunities for challenge and pursuit of excellence and students will be encouraged to participate in competitions such as the Australian Mathematics Competition, and the Computational and Algorithmic Thinking.

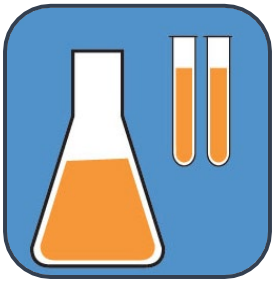
Where can this lead me?

Career Outcomes

- Engineering and Design
- Building Construction
- Research and Development
- Finance and Accounting
- Health Industry Sector
- Information & Communication Technologies

Course Pathways

This pathway provides a solid preparation for Year 8 Maths



CORE

YEAR 7

Science

In Year 7 Science, students are introduced to the fundamentals of Science across a broad range of topics including Physics, Chemistry, Biology, Earth and Space Science. In the Science laboratories, students will participate in exciting practical experiments and captivating demonstrations as well as starting to learn how to design their own experiments. Students will also use a range of equipment, including some of the latest data logging technology on their devices.
Students will also participate in a STEM unit – Egg Drop Challenge. Students will use a variety of resources to "protect" their egg and help it land safely.

What will I Learn?

- Biology – Classification and Ecosystems
- Chemistry – Separating Mixtures
- Earth and Space Science – Seasons and The Planet
- Physics – Forces

What types of things will I do?

- Discover fascinating science concepts through a variety of activities including talks, videos, hands-on activities, independent and group work
- Conduct and observe a range of experiments, both inside and outside the science laboratory
- Plan a variety of investigations and experiments
- Track the migration of organisms within their global environment

Where can this lead me?

Career Outcomes	Course Pathways	
Scientist	Year 8	Science (Core)
Doctor	Year 9	Science (Core)
Engineer	Year 10	Science (Core)
Nurse	VCE	Biology
Marine Biologist		Chemistry
Vet or Vet Nurse		Physics
Teacher		Psychology
Physiotherapist		

CORE

YEAR 7

Humanities

The Year 7 Humanities Curriculum has been designed to assist learners to navigate our 21st Century information-rich world and to gain important background knowledge about our collective past, present, and future. Students will discover what life was like in the Ancient World. They will consider the importance of managing natural resources such as water and evaluate diverse strategies to ensure sustainable use of key resources including those used by Indigenous societies. Students will also learn about the rights and responsibilities which accompany Australian citizenship and the different communities that call Australia home.

What will I Learn?

- History – Ancient Societies Australian and Beyond
- Geography – Water as an Environmental Resource
- Civics – The many expressions of Australian Identity
- Source analysis and evaluation
- Research skills
- Intercultural understanding

What types of things will I do?

- Learn to base my arguments on relevant and accurate evidence
- Create my own historical source
- Reflect on my own use of key economic and environmental resources
- Participate in incursions to bring the learning alive!

Where can this lead me?

Career Outcomes

- Historian
- Politician
- Lawyer
- Financial Advisor
- Researcher or Archivist
- Information Officer
- Journalist
- Academic/Teacher
- Environmental planner

Course Pathways

Year 8	Humanities
Year 9	Humanities
	History / Geography
Year 10	Humanities
	Legal Studies
	Geography
	Financial Literacy
	History Extension
VCE	History
	Business Management
	Legal Studies
	Geography

YEAR 7

Health & Physical Education

Through a combination of theory and practical lessons, students will develop knowledge, processes and skills that will allow them to make informed decisions about their own health and well-being. They will engage in team and individual activities to further their abilities on the playing arena and in the classroom.

What will I Learn?

In practical lessons, students cover topics:

- Personal Fitness
- Athletics
- Tchoukball
- Tee Ball
- Orienteering
- Bat Tennis
- Soccer
- Basketball
- Dance

In theory, health is promoted though the topics:

- Healthy lifestyles
- Promoting health
- Keeping yourself safe
- Puberty and changes

What types of things will I do?

- Learn a variety of sports
- Engage and participate in class discussions
- Work in teams
- Develop physical fitness

Where can this lead me?

Career Outcomes

- Physiotherapist
- Personal Trainer
- Coach in various sports
- Nutritionist
- Youth Counsellor
- Ambulance Officer
- Sports Commentator
- Massage Therapist
- Sport Psychologist
- Sports Journalist
- Fitness Instructor
- Nurse

Course Pathways

Year 9	Health & Physical Education
	Sport Science
	Careers in Sport
Year 10	Biomech. & Exercise Nutrition
	Found. Physical Education
	Found. Health & Human Dev.
VCE	Health & Human Development
	Physical Education
VET	Sport and Recreation

YEAR 7

Sports Science

Through a combination of theory and practical classes, Student Athletes develop knowledge and understanding surrounding their body and the fundamentals of movement to enable them to become faster, stronger and more proficient in their physical pursuits. Practical classes combine Strength and Conditioning, Gymnastics and key sport training whilst theory classes specifically look at the musculoskeletal system, injury prevention, dominant movement patterns and the science behind sporting concepts such as clothing, video imagery and assessment.

What will I Learn?

- Correct movement techniques in body weight movements for strength and conditioning and gymnastics
- Science of sports clothing, film and assessment
- Basic biomechanical principles
- Functional anatomy – musculoskeletal system
- Injury prevention of common sporting injuries
- Protective equipment and safe sporting environments to reduce risks

What types of things will I do?

- Fitness testing with Sport Scientists
- Personalised and group training programs to improve physical strengths and weaknesses
- Hear from professional athletes as guest speakers
- Partnership sporting and mentoring programs
- Wyndham Tech School inquiry programs around topics such as sports clothing, video imagery and prosthetic devices

Where can this lead me?

Career Outcomes	Course Pathways	
Sport Coach	Year 10	Foundations of PE
Physiotherapist		Foundations of HHD
Gym Instructor		Biomechanics & Exercise
Sports Development		Nutrition
Personal Trainer	VCE	Physical Education
Sport and Recreation		Health and Human Dev.
Sport Psychology	VET	Sport and Recreation
Professional Athlete	VCAL	Sport Science Academy Course
Myotherapy		

SEMESTER SUBJECT

YEAR 7

Food Studies

Through a combination of theory and practical lessons, students will develop the knowledge and skills to create basic snacks and meals. They will also learn current food production issues related to sustainability and basic nutrition of key foods. Students Athletes look at a variety of cooking techniques and cuisines from the Indian culture to help support their Hindi studies.

What will I Learn?

- Kitchen Hygiene and Safety
- Different cooking techniques
- The importance of the Australian Guide to Healthy Eating
- To cook a variety of different foods
- How to design meals

What types of things will I do?

- Cook food using correct kitchen safety procedures
- Read and follow recipes
- Design and create a pizza for a special occasion
- Use kitchen equipment and appliances to create dishes
- Design and create a biscuit for McDonald's

Where can this lead me?

Career Outcomes

- Chef
- Food styling
- Food teacher
- Dietician
- Recipe designer
- Food photographer
- Café owner
- Cookbook author

Course Pathways

Year 8	Food Studies
Year 9	Food Studies
Year 10	Food Studies
VCE	Food Studies
VET	Hospitality

SEMESTER SUBJECT

YEAR 7

Art

In Year 7 Art, students will have the opportunity to identify and evaluate how other artists use materials and techniques to express ideas and convey meaning. Students will plan and make their own art works in response to technologies and processes used in the work of other artists.

Students will demonstrate the use of materials, techniques and processes, to express ideas and convey meaning in their own artworks. Students will identify and describe artworks from different cultures, times and places and how ideas are interpreted by audiences. Students Athletes look at a variety of techniques and artistic mediums from the Indian culture to help support their Hindi studies.

What will I Learn?

- Colour therapy
- Drawing
- Printmaking
- Sculpture
- Collage
- Australian & International artists
- Ceramics
- 2D & 3D processes
- Materials & Techniques

What types of things will I do?

- Create a colour wheel
- Printmaking
- Use clay 2 & 3D construction methods to create artworks
- Analyse & Interpret Artworks
- Create artworks in the style of Australian & International artists

Where can this lead me?

Career Outcomes

- Videographer
- Photographer
- Journalism
- Education
- Advertising
- Illustration
- Animation
- Printmaker
- Architecture
- Artist
- Designer
- Interior Design
- Game Design
- Web Design
- Marketing
- Industrial Design
- Fashion Design
- Interior Design

Course Pathways

Year 10	2D Art
	3D Art
	Media
	Photography
	Studio Art
	Visual Communication Design
VCE	Visual Communication Design
	Studio Art
	Media

YEAR 7 & 8

Hindi

At Year 7 and 8 in the Sports Science Academy, students study Hindi through an embedded and immersive curriculum. Indian culture is incorporated in the semester subjects of Food Technology and Art which are taught three sessions per week. Additionally, Student Athletes are exposed to two full days per term of concentrated teaching and learning of Indian language and culture.

Hindi is an official language of India and Fiji and is the most widely spoken language of the Indian sub-continent and is also widely spoken throughout the world. Hindi is used for classroom interactions and transactions, for creating and maintaining classroom relationships, for explaining and practising language forms, and for developing cultural understanding. Within the Sports Science Academy, it is taught using visual, social, physical and tactile teaching styles to engage the students and increase their awareness, knowledge and understanding of the Hindi language and culture in Australia and the world.

What will I Learn?

- Hindi Language through some of the following themes:
  - Greetings and wishes
  - Routines and interactions
  - Elements of Devanagari script
- Architecture and art
- Indian History and Geography
- Popular Indian sports including Cricket & Kabaddi
- Celebrations including Holi and Diwali
- Religious traditions and customs
- Indian cuisine
- Clothing
- Music and dancing

What types of things will I do?

- Learn basic language including greetings, numbers, days/months/dates, animals and objects
- How to read and write elements of Devanagari script
- How to play various traditional musical instruments including the sitar, surdo and santoor
- Bollywood dancing
- Henna painting
- Visit Hindu and Buddhist temples
- Cook Indian cuisine using traditional cooking styles and ingredients
- Skills and tactical game play of Cricket and Kabaddi
- Virtual reality experience of well-known Indian architecture

Year 8

Year 8 Curriculum

The Year 7 curriculum is designed to provide students with a comprehensive range of subjects based on the Victorian Curriculum F–10, which incorporates the Australian Curriculum and reflects Victorian priorities and standards. The curriculum is the common set of knowledge and skills required by all students for life-long learning, social development, active and informed citizenship. The Sports Science Academy program is also offered at this level to further enrich and address diverse student needs.

It should be noted that Hindi is provided to students in the Sports Science Academy through an embedded and immersive curriculum whereby subjects of Food Studies, Art and Humanities incorporate elements of the Indian culture into their programs.

Learning Options available at Year 8

Core Subjects	Sessions per week	Sports Science	Sessions per week
English	6	English	6
Maths	6	Maths	6
Science	4	Science	3
Humanities	3	Humanities	4
Health & Phys Ed	3	Health & Phys Ed	3
Hindi	2	Sports Science	5
Art	2	Art – Semester	3
Food Studies – Semester	2	Food Studies – Semester	3
Drama – Semester	2		
Vis. Com. – Semester	2		
Music – Semester	2		

CORE

YEAR 8

English

In Year 8 English, students further develop their communication skills in both face-to-face and online/virtual environments. Students develop their understanding of how texts, including media texts, are influenced by context, purpose and audience. Students explore a range of increasingly challenging texts individually and in groups. Students create a range of imaginative, informative and persuasive texts as they continue to build on their existing writing skills.

What will I Learn?

- Skills for discussing increasingly complex issues and ideas from a variety of sources.
- Creative, persuasive, informative and text analysis writing.
- Debating and public speaking skills.
- Collaborative communication skills.
- Spelling, punctuation, grammar and vocabulary extension.
- ICT creating and editing tools.

What types of things will I do?

- Reading and Viewing
- Oral presentations
- Analysing texts
- Film Study
- Writing
- Speaking and Listening
- Extended writing tasks
- Group discussions

Where can this lead me?

Career Outcomes

- Journalism, media
- Publishing
- Creative Writing
- Professional Writing and Editing
- Advertising and Marketing
- Government and Public Service

Course Pathways

English is a prerequisite for all future studies.

CORE

Year 8

Maths

The Year 8 Mathematics Curriculum is built around creating further opportunities to continue enriching the lives of all students. Mathematics develops the mathematical capabilities that all students need in many aspects of their lives and provides the fundamentals on which mathematical specialities and professional applications of mathematics are built. Students engage with the Victorian Curriculum via inspiring, interesting, relevant and professionally taught lessons employed specifically to increase student capacity and confidence in mathematical ideas and concepts.

What will I Learn?

Students study patterns, skill applications and concepts within three Key Strands:

- Number and Algebra
- Measurement and Geometry
- Statistics and Probability

Students' progress through eight levels during Scaffolding Numeracy in the Middle Years.

What types of things will I do?

- Reading
- Writing
- Applying
- Consolidating
- Discussing
- Thinking
- Investigating
- Enjoying Mathematics
- Problem Solving
- Calculating
- Challenging Mathematical Concepts

The program at The Grange P-12 College will provide opportunities for challenge and pursuit of excellence and students will be encouraged to participate in competitions such as the Australian Mathematics Competition, and the Computational and Algorithmic Thinking.

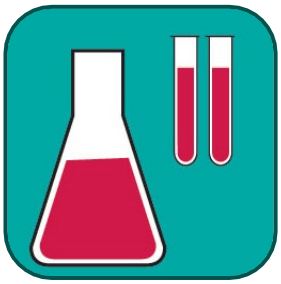
Where can this lead me?

Career Outcomes

- Engineering and Design
- Building Construction
- Research and Development
- Finance and Accounting
- Health Industry Sector
- Information and Communications Technologies

Course Pathways

This pathway provides a solid preparation for Year 9 Maths



YEAR 8

Science

In Year 8 Science, students are introduced to the fundamentals of Science across a broad range of topics including Chemistry, Physics, Biology and Earth and Space Science. In the Science laboratories, students will participate in exciting practical experiments and captivating demonstrations as well as starting to learn how to design their own experiments. Students will get to use a range of equipment, including solar car kits and some of the latest data logging technology on their devices.

Students will also participate in the STEM unit – The Solar Car Challenge. Students will investigate how renewable solar energy can be transformed into usable energy forms to power the future and design a solar car model.

What will I Learn?

- Biology – Cells and Body Systems
- Chemistry – Chemical and Physical Changes
- Earth and Space Science – Geology and Earth's Resources
- Physics – Energy and Light

What types of things will I do?

- Discover fascinating science concepts through a variety of activities including talks, videos, hands-on activities, independent and group work
- Conduct and observe a range of experiments, both inside and outside the science laboratory
- Plan a variety of investigations and experiments
- Design and create a solar car

Where can this lead me?

Career Outcomes

- Scientist
- Doctor
- Engineer
- Nurse
- Marine Biologist
- Vet or Vet Nurse
- Teacher
- Physiotherapist

Course Pathways

Year 9	Science (Core)
	Forensic Science Elective
Year 10	Science (Core)
VCE	Physics
	Psychology
	Biology
	Chemistry

CORE

YEAR 8

Humanities

The Year 8 Humanities Curriculum has been designed to assist learners to navigate our 21st Century information-rich world and to gain important background knowledge about our collective past, present, and future. Students will discover what life was like in the Medieval Period, including a study of causes and effects of the Black Death Pandemic. They will consider the key economic dilemma of scarcity in the face of limited resources and learn about future career options in the context of business management and entrepreneurship. Students will also learn about Australia's urban future by investigating patterns of urbanisation around the world and at a national scale.

What will I Learn?

- History – Medieval and Early Modern Societies
- Economics/Business Management
- Geography – Patterns of Urbanisation
- Source analysis and evaluation
- Research skills
- Intercultural understanding

What types of things will I do?

- Participate in a re-enactment of key aspects of daily life in the Medieval World
- Create your own innovative future product trend
- Virtual field trips and GIS Technologies
- Conduct field work in Melbourne CBD to learn more about Australia's urban future

Where can this lead me?

Career Outcomes

- Politician
- Lawyer
- Financial Advisor
- Researcher or Archivist
- Information Officer
- Journalist
- Academic/Teacher
- Environmental planner
- Historian

Course Pathways

Year 9	Humanities
	History / Geography
Year 10	Humanities
	Legal Studies
	Geography
	Financial Literacy
	History Extension
VCE	History
	Business Management
	Legal Studies
	Geography

YEAR 8

Health & Physical Education

Through a combination of theory and practical lessons, students will develop knowledge, processes and skills that will allow them to make informed decisions about their own health and well-being. They will engage in team and individual activities to further their abilities on the playing arena and in the classroom.

What will I Learn?

In practical lessons, students cover topics:

- Personal Fitness
- Volleyball
- AFL
- Netball
- Ultimate Frisbee
- Badminton
- Athletics
- Softball/Baseball
- Handball

In theory, health is promoted through the topics:

- Sports nutrition
- Mental Health
- Gender and sexual identify
- Sexual health

What types of things will I do?

- Learn a variety of sports
- Engage and participate in class discussions
- Work in teams
- Develop physical fitness

Where can this lead me?

Career Outcomes

- Physiotherapist
- Personal Trainer
- Sports Coach
- Nutritionist
- Youth Counsellor
- Ambulance Officer
- Sports Commentator
- Massage Therapist
- Sport Psychologist
- Sports Journalist
- Fitness Instructor
- Nurse

Course Pathways

Year 9	Health & Physical Education
	Sport Science
	Careers in Sport
Year 10	Biomech. & Exercise Nutrition
	Found. Physical Education
	Found. Health & Human Dev.
VCE	Health & Human Development
	Physical Education
VET	Sport and Recreation

YEAR 8

Sports Science

Through a combination of theory and practical classes, Student Athletes develop knowledge and understanding surrounding their body and the fundamentals of movement to enable them to become faster, stronger and more proficient in their physical pursuits. Practical classes combine Strength and Conditioning, Gymnastics and key sport training as students learn how to progress and regress compound body weight movements and how to program these into physical fitness sessions. Theory classes specifically look at the principles and methods of training, sport psychology, nutrition to enhance performance and the science behind sporting concepts such as clothing, video imagery and assessment.

What will I Learn?

- Correct movement techniques in body weight movements for strength and conditioning and gymnastics
- Sport Science discovery programs
- Sport Psychology
- Principles and methods of how to train
- Nutrition to fuel athlete's for optimal performance
- Performance and recovery strategies
- Sports technology at various athletic events

What types of things will I do?

- Fitness testing with Sport Scientists
- Personalised and group training programs to improve physical strengths and weaknesses
- Hear from professional athletes as guest speakers
- Partnership sporting and mentoring programs
- Wyndham Tech School inquiry programs around topics such as sports clothing, video imagery and prosthetic devices

Where can this lead me?

Career Outcomes

- Sport Coach
- Physiotherapist
- Gym Instructor
- Sports Development
- Personal Trainer
- Sport and Recreation
- Sport Psychology
- Professional Athlete
- Myotherapy

Course Pathways

Year 10	Foundations of PE
	Foundations of HHD
	Biomechanics & Exercise
	Nutrition
VCE	Physical Education
	Health and Human Dev.
VET	Sport and Recreation
VCAL	Sport Science Academy Course

SEMESTER SUBJECT

YEAR 8

Food Studies

Through a combination of theory and practical lessons, students will continue to develop the knowledge and skills to create basic snacks and meals. They will learn about the main nutrients in food and their role in maintaining a healthy body. They will also study the link between nutrition and lifestyle diseases. Students Athletes look at a variety of cooking techniques and cuisines from the Indian culture to help support their Hindi studies.

What will I Learn?

- Kitchen Safety and Hygiene
- How to design a meal
- The importance of healthy eating
- How other cultures influence our food choices

What types of things will I do?

- Cook food using correct kitchen safety procedures
- Cook foods from other cultures
- Design and create a unique dish
- Use kitchen equipment and appliances to create dishes

Where can this lead me?

Career Outcomes

- Chef
- Food styling
- Food teacher
- Dietician
- Ambulance Officer
- Cookbook author
- Event Coordinator
- Food photographer
- Café owner
- Food Inspector
- Nurse

Course Pathways

Year 9	Food
Year 10	Food
VCE Unit 1-4:	Food Studies
VET	Hospitality
	Healthy Lifestyles

SEMESTER SUBJECT

YEAR 8

Art

In Year 8 Art, students will have the opportunity to identify and evaluate how other artists use materials and techniques, to express ideas and convey meaning.

Students will plan and make their own art works in response to technologies and processes used in the work of other artists. Students will demonstrate the use of materials, techniques and processes, to express ideas and convey meaning in their own artworks. Students Athletes look at a variety of techniques and artistic mediums from the Indian culture to help support their Hindi studies.

What will I Learn?

- Drawing
- Painting
- Printmaking
- Ceramics
- 3D Construction techniques
- Australian and international artists
- Cubism
- Pop Art
- Appropriation

What types of things will I do?

- Observational drawing
- Use a range of materials to construct 2D & 3D artworks
- Create artworks in the style of Australian & International artists
- Use different materials to create artworks
- Painting techniques
- Use clay to construct artworks
- Learn to analyse & interpret artworks

Where can this lead me?

Career Outcomes

- Videographer
- Photographer
- Journalism
- Education
- Advertising
- Marketing
- Animation
- Interior Design
- Industrial Design
- Artist
- Designer
- Architecture
- Printmaker
- Illustration
- Web Design
- Fashion Design
- Game Design
- Environmental Design

Course Pathways

Year 10:	2D Art
	3D Art
	Photography
	Visual Communication Design
	Studio Art
	Media
VCE	Visual Communication Design
	Studio Art
	Media

YEAR 7 & 8

Hindi

At Year 7 and 8 in the Sports Science Academy, students study Hindi through an embedded and immersive curriculum. Indian culture is incorporated in the semester subjects of Food Technology and Art which are taught three sessions per week. Additionally, Student Athletes are exposed to two full days per term of concentrated teaching and learning of Indian language and culture.

Hindi is an official language of India and Fiji and is the most widely spoken language of the Indian sub-continent and is also widely spoken throughout the world. Hindi is used for classroom interactions and transactions, for creating and maintaining classroom relationships, for explaining and practising language forms, and for developing cultural understanding. Within the Sports Science Academy, it is taught using visual, social, physical and tactile teaching styles to engage the students and increase their awareness, knowledge and understanding of the Hindi language and culture in Australia and the world.

What will I Learn?

- Indian Language through the following themes:
  - Greetings and wishes
  - Routines and interactions
  - Elements of Devanagari script
- Architecture and art
- Indian History and Geography
- Popular Indian sports including Cricket & Kabaddi
- Celebrations including Holi and Diwali
- Religious traditions and customs
- Indian cuisine
- Clothing
- Music and dancing

What types of things will I do?

- Learn basic language including greetings, numbers, days/months/dates, animals and objects
- How to read and write elements of Devanagari script
- How to play various traditional musical instruments including the sitar, surdo and santoor
- Bollywood dancing
- Henna painting
- Visit Hindu and Buddhist temples
- Cook Indian cuisine using traditional cooking styles and ingredients
- Skills and tactical game play of Cricket and Kabaddi
- Virtual reality experience of well-known Indian architecture

Year 9

Year 9 Curriculum

The Year 9 curriculum has been developed to acknowledge that this is an important transitional period for students. The aim of the program is to set the framework for their future in education and beyond. The program promotes the College's high expectations and takes a holistic approach to working with students with a focus on their academic development, social and emotional wellbeing and careers and pathways planning.

To further embed students' knowledge and understanding, a broad range of experiences are given to students at Year 9 as they undertake core studies over a year in English, Maths, Humanities, Science and Physical Education/Health. Students complete 3 semester subjects which limited to the Sports Science Academy of Fitness, Careers in Sport and Sport Science. These subjects build on knowledge developed in earlier years of Sports Science subjects and lead into future VCE and VCAL studies. In addition, Student Athletes' are able to choose one elective subject from the list provided below.

Learning Options available at Year 9

Core Subjects	Sessions	Electives – 4 Sessions each		Sports Science	Sessions
English	6	Food	Stretch Bridging	English	6
Maths	6	2D Art	Stretch Advanced	Maths	6
Science	4	3D Art	Forensic Science	Science	4
Humanities	3	Music	Humanities - Research	Humanities	3
Health & Phys Ed	3	Drama	Web Design	Health & Phys Ed	3
Inspire – Semester (Rubicon)	4	Media	Game Design	Sport Science – Year	4
				Anatomy & Physiology	4
Students choose 3 from the Electives	4			Choose one from Electives	4

CORE

YEAR 9

English

In Year 9 English, students engage with a variety of texts for enjoyment. They interpret, create, evaluate, discuss and perform a wide range of literary texts. These include various types of media texts: newspapers, film and digital texts, fiction, non-fiction, poetry, dramatic performances and multimodal texts, with themes and issues involving levels of abstraction, higher order reasoning and intertextual references. Students develop a critical understanding of the contemporary media, and the differences between media texts.

What will I Learn?

- Skills for discussing increasingly complex issues and ideas from a variety of sources.
- The study of texts that explore themes of human experience, cultural significance, interpersonal relationships, and ethical and global dilemmas within real world and fictional settings.
- Creative, persuasive, informative and text-response writing.
- Debating and public speaking skills.
- Collaborative communication skills.
- ICT creating and editing tools.

What types of things will I do?

- Reading and Viewing
- Oral presentations
- Analysing texts
- Film Study
- Writing
- Speaking and Listening
- Extended writing tasks
- Group discussions

Where can this lead me?

Career Outcomes

- Journalism, media
- Publishing
- Creative Writing
- Professional Writing and Editing
- Advertising and Marketing
- Government and Public Service

Course Pathways

English is a prerequisite for all future studies.

CORE

YEAR 9

Maths

The Year 9 Mathematics Curriculum is built around creating further opportunities to continue enriching the lives of all students. Mathematics develops the mathematical capabilities that all students need in many aspects of their lives, and provides the fundamentals on which mathematical specialities and professional applications of mathematics are built.

Students engage with the Victorian Curriculum via inspiring, interesting, relevant and professionally taught lessons employed specifically to increase student capacity and confidence in mathematical ideas and concepts.

What will I Learn?

Students study patterns, skills applications and concepts within the three Key Strands:

- Number and Algebra
- Measurement and Geometry
- Statistics and Probability

What types of things will I do?

- Reading
- Writing
- Applying
- Consolidating
- Discussing
- Thinking
- Investigating
- Challenging Mathematical Concepts
- Problem Solving
- Calculating
- Enjoying Mathematics

Students are encouraged to maintain an approved "Bound Reference Notebook" (following the Year 12 VCAA guidelines) which is permitted in ALL assessments.
The program at The Grange P-12 College will provide opportunities for challenge and pursuit of excellence and students will be encouraged to participate in competitions like the Australian Mathematics Competition and the Australian Mathematics Intermediate Olympiad.

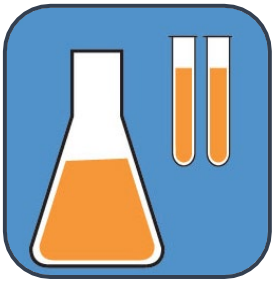
Where can this lead me?

Career Outcomes

- Engineering and Design
- Building Construction
- Research and Development
- Information and Communications Technologies
- Finance and Accounting
- Health Industry Sector
- Pilot

Course Pathways

This pathway provides a solid preparation for Year 10 Maths



CORE

YEAR 9

Science

In Year 9 Science, students begin to add depth to their science knowledge, which will assist in preparing them for VCE science subjects. Students study a variety of topics including Chemistry, Physics, Biology and Earth and Space Science. Students will also further develop their practical inquiry and experimental skills by participating in more technical and rigorous experiments.

Students will also participate in a STEM unit - Wiring a model house. They will investigate how to wire a house using parallel and series circuits.

What will I Learn?

- Biology – Coordinated Human Body Systems
- Chemistry –Radioactivity and Chemical Reactions
- Earth and Space Science – Volcanoes and Earthquakes
- Physics – Energy Transfers and Field Models

What types of things will I do?

- Discover fascinating science concepts through a variety of activities including talks, videos, hands-on activities, independent and group work
- Conduct and observe a range of experiments, both inside and outside the science laboratory
- Plan a variety of investigations and experiments
- Design and wire a model house

Where can this lead me?

Career Outcomes	Course Pathways	
Scientist	Year 10	Science (Core)
Doctor		Intro to VCE Science (Elective)
Engineer		Psychology (Elective)
Nurse	VCE	Biology
Marine Biologist		Chemistry
Vet or Vet Nurse		Environmental Science
Teacher		Physics
Physiotherapist		Psychology

CORE

YEAR 9

Humanities

The Year 9 Humanities Curriculum has been designed to assist learners to navigate our 21st Century information-rich world and to gain important background knowledge about our collective past, present, and future. Students will consider the effects of food cultivation practices worldwide and consider the implications of food security on nations and individuals. Students will also learn about the causes and consequences of World War One. Students explore the ways in which human societies are governed and compare/contrast the Australian political context with that of another country. Lastly, students examine the costs and benefits of global trade.

What will I Learn?

- History – World War One
- Geography – Food Production and Security
- Civics/Economics – Politics and Global Trade
- Source analysis and evaluation
- Research skills
- Intercultural understanding and ethical reasoning

What types of things will I do?

- Learnt to base my arguments on relevant and accurate evidence
- Participate in a sustainability scavenger hunt on a real-life farm
- Participate in online discussion boards and virtual tours/experiences
- Create my own youth political party and participate in a mock parliament
- Write a mock proposal and cost-benefit analysis to council on an economic issue

Where can this lead me?

Career Outcomes	Course Pathways	
Researcher or Archivist	Year 10	Humanities
Information Officer		Geography
Journalist		Financial Literacy
Academic/Teacher		Legal Studies
Environmental planner		History Extension
Historian	VCE	Business Management
Politician		Legal Studies
Lawyer		History
Financial Advisor		Geography

CORE

YEAR 9

Health & Physical Education

Through a combination of theory and practical lessons, students will develop knowledge, processes and skills that will allow them to make informed decisions about their own health and well-being. They will engage in team and individual activities to further their abilities on the playing arena and in the classroom. There is a heavy emphasis on teamwork via the SEPEP program.

What will I Learn?

In practical lessons, students cover:

- Personal Fitness
- Athletics
- Golf
- Indoor Hockey
- Dance
- Cricket
- Touch Football
- Baseball
- Gridiron – NFL
- Orienteering
- SEPEP (Sport Education through Phys. Ed. Program)

In theory, health is promoted through the topics:

- Physical and mental health
- Risk Taking
- Building respectful relationships
- Sexual Health
- Puberty and changes

What types of things will I do?

- Learn a variety of sports
- Engage and participate in class discussions
- Work in teams
- Develop physical fitness

Where can this lead me?

Career Outcomes

- Physiotherapist
- Personal Trainer
- Coach in various sports
- Nutritionist
- Youth Counsellor
- Ambulance Officer
- Sports Commentator
- Massage Therapist
- Sport Psychologist
- Sports Journalist
- Fitness Instructor
- Nurse

Course Pathways

Year 9	Health & Physical Education
	Sport Science
	Careers in Sport
Year 10	Biomech. & Exercise Nutrition
	Found. Physical Education
	Found. Health & Human Dev.
VCE	Health & Human Development
	Physical Education
VET	Sport and Recreation

YEAR 9

Sports Science

CAREERS IN SPORT SEMESTER SUBJECT

Through a combination of theory and practical classes, this course enables students to gain a more comprehensive understanding of the broad range of careers available within the sporting industry. Specifically, students work with Sport Science Academy partnership programs including NRL Victoria's In League in Harmony and Iron Armour Academy to investigate ways in which the sporting industry can promote positive mindsets and inclusivity for all. Students also take a detailed look at the legal and ethical issues for officials and athletes as well as the various coaching and learning styles for athletes.

What will I Learn?

- How to manage a coach a team
- Legal and ethical responsibilities for an athlete/coach
- Sport psychology and mindset training
- How to identify hazards and risks during events
- How to develop and implement safe training programs for athletes with an importance on warm up and cool down

What types of things will I do?

- Participate in NRL Victoria's In League in Harmony
- Participate in Iron Armour mentoring and mindset training
- Develop and complete safe fitness and sport training
- Gain Australian Sports Commission Online Officiating Certificate

Where can this lead me?

Career Outcomes	Course Pathways	
Sport Coach	Year 10	Foundations of PE
Physiotherapist		Foundations of HHD
Gym Instructor		Biomechanics & Exercise
Sports Development		Nutrition
Personal Trainer	VCE	Physical Education
Sport and Recreation Officer		Health and Human Dev.
Myotherapy	VET	Sport and Recreation
Professional Athlete		

YEAR 9

Sports Science

FITNESS SEMESTER SUBJECT

Through a combination of theory and practical classes, students develop a knowledge and understanding of the science behind improving sporting performance. Specifically, students gain a detailed understanding of the principles and methods that underpin fitness training and various athletic practices used to enhance the cardiorespiratory and musculoskeletal systems.

What will I Learn?

- Factors that govern sports performance including fitness components and methods of assessment
- How the application of science is involved in the analysis and prescription of improved performance
- Basic functional anatomy
- How athletes achieve elite performance in sport including training methods, training principles and performance enhancement methods

What types of things will I do?

- Develop knowledge and understanding relating to physical activity
- Theory investigation and practical activity work including fitness testing and personal/group fitness programming
- Analyse program effectiveness and physical gains based on the application of training principles and methods

Where can this lead me?

Career Outcomes	Course Pathways	
Sport Coach	Year 10	Foundations of PE
Physiotherapist		Foundations of HHD
Gym Instructor		Biomechanics & Exercise
Sports Development		Nutrition
Personal Trainer	VCE	Physical Education
Sport and Recreation Officer		Health and Human Dev.
Myotherapy	VET	Sport and Recreation
Professional Athlete		

YEAR 9

Anatomy & Physiology

Through a combination of theory and practical classes, students develop a knowledge and understanding of the science behind improving sporting performance. Specifically, Student Athletes investigate the body systems responsible for human movement including the musculoskeletal and cardiorespiratory systems, as well as the biomechanical principles involved to improve skill technique and acquisition. Practical classes combine both physical activity and cooking to embed understanding surrounding fuelling the body for improved physical performance.

What will I Learn?

- Functional anatomy
- Basic biomechanical and movement principles
- Ways in which theoretical aspects will be integrated with practice and physical activity
- Factors that govern sports performance
- How athletes achieve elite performance in sport
- Specific dietary recommendations for sport performance, preparation and recovery

What types of things will I do?

- Develop knowledge and understanding relating to physical activity
- Theory investigation and practical activity work
- Analyse skill acquisition from a biomechanical perspective
- Cook balanced meals to assist with sporting Performance, preparation and recovery

Where can this lead me?

Career Outcomes	Course Pathways	
Sport Coach	Year 10	Foundations of PE
Physiotherapist		Foundations of HHD
Gym Instructor		Biomechanics & Exercise
Sports Development		Nutrition
Personal Trainer	VCE	Physical Education
Sport and Recreation Officer		Health and Human Dev.
Myotherapy	VET	Sport and Recreation
Professional Athlete		

CHOOSE 1 ELECTIVE

YEAR 9

Food Studies

Through a combination of theory and practical lessons, students will expand their knowledge and skills from previous years. Over a semester they will create basic snacks and meals based on the idea of healthy eating.

What will I Learn?

- Kitchen Safety and Hygiene
- Meal planning and design
- To respond to a design brief
- Bread making skills for life
- Big event product and presentation skills

What types of things will I do?

- Sensory evaluations of food
- Plan and create a healthy meal for teenagers
- Use yeast to make a variety of bread products
- Participate in a showcase event with your bread product

Where can this lead me?

Career Outcomes

- Chef
- Nutritionist
- Restaurant Manager
- Hospitality Events

Course Pathways

Year 10	Food Studies
VCE	Food Studies
VET	Hospitality

CHOOSE 1 ELECTIVE

YEAR 9

2D Art

Students will have the opportunity to explore the visual arts practices and styles of Australian and International artists as inspiration to develop a personal style, explore and express ideas, concepts and themes in art works.

The students will explore how artists manipulate materials, techniques, technologies and processes to develop and express their intentions in art works and use these techniques to develop their own artworks.

Students analyse and evaluate artworks and exhibitions from different cultures, times and places, and discuss how ideas and beliefs are interpreted by audiences.

What will I Learn?

- Materials & techniques
- Rendering techniques
- Observational drawing
- Australian & International artists
- Printmaking
- Painting & Drawing

What types of things will I do?

- Develop a folio of work
- Observational drawing
- Artist studies
- Printmaking
- Drawing
- Painting

Where can this lead me?

Career Outcomes

- Videographer
- Photographer
- Journalism
- Education
- Advertising
- Illustration
- Animation
- Printmaker
- Architecture
- Artist
- Designer
- Interior Design
- Game Design
- Web Design
- Marketing
- Industrial Design
- Fashion Design
- Interior Design

Course Pathways

Year 10	2D Art
	3D Art
	Media
	Photography
	Studio Art
	Visual Communication Design
VCE	Visual Communication Design
	Studio Art
	Media

CHOOSE 1 ELECTIVE

YEAR 9

3D Art

Students will have the opportunity to explore the visual arts practices and styles of Australian and International artists as inspiration to develop a personal style, explore and express ideas, concepts and themes in art works.

The students will explore how artists manipulate materials, techniques, technologies and processes to develop and express their intentions in art works and use these techniques to develop their own artworks.
Students analyse and evaluate artworks and exhibitions from different cultures, times and places, and discuss how ideas and beliefs are interpreted by audiences.

What will I Learn?

- Materials & techniques
- Ceramics
- Australian & International artists
- Sculpture

What types of things will I do?

- Develop a folio of work
- Observational drawing
- Artist studies
- Develop sketches using materials & techniques
- 3D Construction Techniques
- Ceramics

Where can this lead me?

Career Outcomes

- Videographer
- Photographer
- Journalism
- Education
- Advertising
- Illustration
- Animation
- Printmaker
- Architecture
- Artist
- Designer
- Interior Design
- Game Design
- Web Design
- Marketing
- Industrial Design
- Fashion Design
- Interior Design

Course Pathways

Year 10	2D Art
	3D Art
	Media
	Photography
	Studio Art
	Visual Communication Design
VCE	Visual Communication Design
	Studio Art
	Media

CHOOSE 1 ELECTIVE

YEAR 9

Media

Students have the opportunity to create a digital portfolio based upon a chosen theme.

Students will explore the technical aspects of the digital camera to explore symbolic elements within their themes. Students will develop their own opinion about the influence of Media in today's society, by looking at various genres of film and media.

The students will learn techniques to manipulate and make representations and meaning in film production.

What will I Learn?

- Photography
- Videography
- Film making
- How to use a DSLR camera and studio equipment
- Post-production – editing software
- Media & Film analysis

What types of things will I do?

- Create a digital portfolio
- Create a short film
- Camera activities
- Storyboard & script writing
- Watch and analyse TV shows and films
- Photo/Video editing

Where can this lead me?

Career Outcomes		Course Pathways	
Videographer	Director	Year 10	2D Art
Photographer	Producer		3D Art
Journalism	Set Designer		Media
Education	YouTuber		Photography
Advertising	Podcaster		Studio Art
Animator	Marketing		Visual Communication Design
Storyboarding	Camera Operator		
Radio/TV Presenter	Film/TV Show editor	VCE	Visual Communication Design
Cinematographer	Show runner		Studio Art
Script writer	Script writer		Media

CHOOSE 1 ELECTIVE

YEAR 9

Visual Communication Design

Students will have the opportunity to demonstrate their use and understanding of visual communication design skills, techniques, conventions and processes in a range of design fields, such as the Communication, Environmental and Industrial. The students will develop and present visual communications using the design process that demonstrate the application and manipulation of methods, materials, media, design elements and design principles that meet the requirements of a specific brief

Students will use manual and digital drawing methods to create visual communications in the specific design fields of Environmental, Industrial and Communication Design. Students will analyse and evaluate the factors that influence design decisions in a range of visual communications from different historical, social and cultural contexts as well as evaluate the use of methods, media, materials and design elements and principles.

What will I Learn?

- Elements & Principles of Design
- Design Process
- Folio Building
- Architectural & technical drawing types
- Methods, Media & Materials
- Digital Technologies (EG: Adobe Illustrator)

What types of things will I do?

- Develop a folio of work
- Observational drawing
- Rendering techniques
- Architectural drawing
- Design original work in response to a brief
- Methods, Media & Materials experimentation & development

Where can this lead me?

Career Outcomes

- Videographer
- Photographer
- Journalism
- Education
- Advertising
- Illustration
- Animation
- Printmaker
- Architecture
- Artist
- Designer
- Interior Design
- Game Design
- Web Design
- Marketing
- Industrial Design
- Fashion Design
- Interior Design

Course Pathways

Year 10:	2D Art
	3D Art
	Media
	Photography
	Studio Art
	Visual Communication Design
VCE Units 1-4:	Visual Communication Design
	Studio Art
	Media

CHOOSE 1 ELECTIVE

YEAR 9

Drama

In this elective course, students build on skills, knowledge, and experience in Drama as a creative and performing art. Students explore the dramatic elements of role and characterisation through their studies of improvisation, mask, and ensemble. They explore the historical and cultural contexts of mask in theatre and learn to identify and respond to the audience and actor relationship that has continued to evolve from these traditional performance styles. Students are given the opportunity to design and make masks and present their design choices and interpretations. Students learn about the theatre conventions of Jerzy Grotowski's 'Poor Theatre' and learn how to interpret a script to apply these techniques in a devised ensemble performance.

What will I Learn?

Drama Practice:
- Performance skills
- Dramatic theory
- Devised performance skills
- Responding to performance

Play Building:
- Ensemble performance
- Applying dramatic theory
- Improvisation skills
- Responding to performance stimulus & prompts

Acting & Stagecraft in Performance:
- Evaluation of stagecraft in performance
- Prop & costume design elements
- Transformation of objects

Form & Style:
- Dramatic elements
- Theatrical conventions
- Play scripts

What types of things will I do?

- Workshop performance styles & conventions
- Improvisation
- Evaluate and design stagecraft
- Group performance
- Theatrical brief
- Ensemble piece
- Script writing
- Performing in front of an audience

Where can this lead me?

Career Outcomes		Course Pathways	
Entrepreneur	Community Engagement	Year 10	Drama
Educator	Professional Acting		
Art Therapies	Film & production	VCE	Theatre Studies
Directing	Dramaturgy		

Extra-curricular: Participation in School Productions/Musicals in a number of performing and/or backstage roles

CHOOSE 1 ELECTIVE

YEAR 9

Music

Music learning combines listening, performing and composing activities. These activities, developed sequentially, enhance students' capacity to perceive and understand music.
As students' progress in their study of Music, they learn to value and appreciate the power of music to transform the heart, soul, mind and spirit of the individual. In this way students develop an aesthetic appreciation and enjoyment of music.

What will I Learn?

- History of Blues
- Music Promotion/Advertising
- Rhythmic playing on the keyboard
- Ensemble
- 12 Bar Blues Structure
- Blues scale
- History of Rock n Roll

What types of things will I do?

In Year 9 through listening, performing and composing, students will be able to identify cultural, social and historical contexts of music. Students will also accumulate skills in rhythm, pitch and musicianship.

- Play the keyboard & ukulele individually
- Individual performance
- Written assessment
- Practical assessments
- Ensemble Performance
- Listening tasks

Where can this lead me?

Career Outcomes		Course Pathways	
Musical	Music Producer	Year 10	Music
Song writer	Music Composer		
Video game composer	Recording Engineer	VCE	Music
Music Therapist	Sound Engineer		
Music Teacher	Events		

Extra-curricular: Opportunities for participation in School Productions/Musicals in a number of performing and/or backstage roles

CHOOSE 1 ELECTIVE

YEAR 9

Forensic Science

An engaging STEM subject that enables students to develop their knowledge and understanding of forensic science including crime scene analysis. Students learn about, and use, different analytical techniques such as fingerprinting, tyre tracking, blood typing, blood spatter analysis, DNA analysis plus many more! Students perform experiments using these techniques to solve staged crimes and learn to evaluate their use in the real world.

What will I Learn?

- What types of evidence of a crime exist
- How physical evidence is collected
- How to perform crime scene analysis
- Use problem solving techniques to evaluate information and propose solutions
- Applying scientific reasoning to assess information

What types of things will I do?

- Learning different types of evidence collection
- Blood analysis
- Impression Evidence
- Hair and Fibre analysis
- Solving various crimes using clues and evidence
- Fingerprinting
- Chromatography
- Physical and Chemical Identification

Where can this lead me?

Career Outcomes

- Forensic Scientist
- Doctor
- Engineer
- Nurse
- Police Officer
- Psychologist
- Lawyer
- Crime Scene Investigator

Course Pathways

Year 10	Science (Core)
Year 10	Intro to VCE Science (Elective)
Year 10	Psychology (Elective)
VCE	Biology
	Chemistry
	Environmental Science
	Physics
	Psychology

CHOOSE 1 ELECTIVE

YEAR 9

Game Design

Have you ever wondered what goes into making the games you love to play? We will discover how it is done! We have the opportunity to take games from a 2D platform to making your own virtual reality game! You will learn skills in coding, game design, marketing and prove yourselves to be an innovative 21st-century creator!

What will I Learn?

- Game Development in the 21st Century
- How to use Coding (GameMaker to Virtual Reality)
- How to use Design Thinking to make a product
- How to sell a product

What types of things will I do?

- Discover what makes a good game
- Explore the gaming industry
- Design and make your own game
- Learn about different game types
- Talk to real game developers

PLEASE NOTE: In this course there is an expectation that you will learn high level coding and is not about playing games.

Where can this lead me?

Career Outcomes	Course Pathways	
Game design and development	Year 10	Robots
Game industry, simulation and virtual reality		Application Development
Film and animation	VCE	Unit 1 &2 – Applied Computing
3D Graphic design and robotics		Unit 3 & 4 – Data Analytics
Software Design and Development	VET	Media

CHOOSE 1 ELECTIVE

YEAR 9

Web Design

Students are able to create purposeful, powerful communication using innovative web technology to empower them to share their voice with the international community. Students will research, develop and create professional websites using Dreamweaver, graphics software and video editing to help solve specific relevant issues of today's world. 21st Century innovative STEM tools and learning are embedded into this course as the students' reach beyond the classroom and become part of the international community.

What will I Learn?

- Discuss and analyse range of current websites
- The Student Voice – Contributing via Website Development
- Apply innovation thinking skills
- How to apply the design process to create a simple website

What types of things will I do?

- Undertake a project to create your own website
- Research alternate web designs
- Collect and analyse feedback
- Revise and publish the website
- Explore the challenge or problem to solve
- Develop a prototype website
- Apply a range of 21st Century Skills to the design and development of your website

Where can this lead me?

Career Outcomes	Course Pathways	
Web design and development	Year 10	Robots
Software design and development		Application Development
Digital publication and advertising	VCE	Unit 1 &2 – Applied Computing
Digital Graphic design		Unit 3 & 4 – Data Analytics
Scripting and Programming	VET	Media

YEAR 9

Humanities Research Plus

The ability to find reliable information from several research sources is a key skill which students are expected to have mastered in high school. The Humanities Research Plus elective will help you to learn how to conduct research using printed, media and online sources using the *Grange Research Method*. This vital skill will assist with research tasks in every subject and pathway. As a backdrop to research skills, students will learn various topics drawn from Geography, History, Sociology and Legal Studies. The subject will end with an independent student 'passion project' on a subject of student choice. Do you get stuck when looking for answers to questions? Not sure what Google search terms will get the best results? Unsure how to check if a source is 'fake news' or 'reliable'? Look no further than Humanities Research Plus! **This subject will give you the edge you need no matter which pathway you are interested in!**

What will I Learn?

° Legal Studies – How does the law affect young people in Wyndham?
° History and Geography – How have travel improvements affected people and places in the past and present?
° Passion Project – a topic of your choice that you are passionate about!
° Learn the *Grange Research Method* and apply it to all future subjects.

What types of things will I do?

° Learn to base my arguments on relevant and accurate evidence
° Consider whether one source can ever give an accurate account of an event
° Participate in online discussion boards and virtual tours/experiences
° Create your own research question and locate answers to it using best research practices.
° Learn more about big questions which continue to be discussed and debated today!

Where can this lead me?

Career Outcomes	Course Pathways	
° Historian	Year 10	Humanities
° Politician		Geography
° Lawyer		Financial Literacy
° Financial Advisor		Legal Studies
° Researcher or Archivist		History Extension
° Information Officer	VCE	Business Management
° Journalist		Legal Studies
° Academic/Teacher		History
		Geography

Year 10

Year 10 Curriculum

The Year 10 curriculum is designed to provide students with a comprehensive range of subjects based on the Victorian Curriculum F–10, which incorporates the Australian Curriculum and reflects Victorian priorities and standards. The curriculum is the common set of knowledge and skills required by all students for life-long learning, social development, active and informed citizenship. Students in Year 10 also have the opportunity, subject to availability, to study a VCE subject. The High Achievers program and the Sports Science Academy program are also offered at this level to further enrich and address diverse student needs.

Specifically, in the Sports Science Academy, semester subjects are preselected for students as they complete Sports Science whereby, they further their understanding to learn the Foundations of Physical Education (PE) and Health and Human Development (HHD). These two subjects give students an excellent base to progress on to VCE PE and HHD or into the Vocational Major (VM) Sport Science pathway. In addition to these two semester subjects, Student Athletes begin the VET subject Sport and Recreation. This provides a fantastic opportunity for students to challenge themselves and fast track their skills and understanding in the sporting field, completing the Certificate 3 in Year 11. If a student goes on to complete the VCE pathway, they are then able to have the subject contribute to their ATAR with a study score derived from scored assessment or as a 10% increment as a 5th or 6th subject. If a student instead goes on to complete the VM pathway, they do not have to pick up an additional subject at Year 12 and instead can complete more structured workplace learning to increase their employability at the completion of Year 12.

Learning Options available at Year 10

Core subjects 5 Sessions each	Semester Electives (offered) 5 Sessions each		Sport Science 5 Sessions each
English	Creative Writing and Literature	2D Art	English
Maths	Introduction to General Maths	3D Art	Maths
Science	Introduction to Maths Methods	Visual Communication Design	Science
Humanities	General Science –Intro VCE	Darkroom Photography	Humanities
	Psychology	Media	Sports Science (Full Year)
	Future Societies -Geography/History	Music	
	Financial Literacy	Drama	VET Sport and Recreation (Full Year)
	History Extension	Robotics	
	Legal Studies	Application Development	
	Biomechanics & Exercise Nutrition	Foundations of PE	
	Food Studies	Foundations of Health and Human Development	

CORE

YEAR 10

English

The Year 10 English curriculum is built around the three connected strands of Language, Literature and Literacy. Together the strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking, writing and creating. Students engage with a variety of texts for enjoyment. They interpret, create, evaluate, discuss and perform a wide range of literary texts in which the primary purpose is aesthetic, as well as texts designed to inform and persuade. Students will study a variety of texts, including newspapers, film and digital texts, fiction, nonfiction, poetry, dramatic performances and multimodal texts. Students develop critical understanding of the contemporary media, and the differences between media texts.

What will I Learn?

- Students evaluate how text structures can be used in innovative ways by different authors.
- Students explain how the choice of language features, images and vocabulary contributes to the development of individual style.
- Students develop and justify their own interpretations of texts.
- Students explain different viewpoints, attitudes and perspectives through the development of cohesive and logical arguments.
- Students develop their own writing style by experimenting with language features, stylistic devices, text structures and images.
- Students create a wide range of texts to articulate complex ideas.

What types of things will I do?

- Reading and Viewing
- Oral presentations
- Analysing texts
- Writing
- Speaking and Listening
- Extended writing tasks

Where can this lead me?

Career Outcomes

- Journalism, media
- Publishing and Creative Writing
- Professional Writing and Editing
- Advertising and Marketing
- Government and Public Service

Course Pathways

VCE — English, EAL

YEAR 10

Mathematics

Year 10 Mathematics presents materials for students to have a pathway towards VCE Foundation Mathematics, General Mathematics and Mathematics Methods CAS.

The Year 10 Mathematics Core Curriculum is built around the tree interconnected strands of Measurement and Geometry, Number and Algebra, and Statistics and Probability.

The curriculum is focused around the four Proficiency Scales of Understanding, Fluency, Problem Solving and Reasoning, to develop and promote interest, enjoyment, skills and applied knowledge in Mathematics.

What will I Learn?

Students study patterns, skills applications and concepts within the three Key Strands:

- Number and Algebra
- Measurement and Geometry
- Statistics and Probability

What types of things will I do?

- Number skill development
- Measurement and Geometry focused on applications of skills in practical situations
- Probability understanding and utilisation of interpretation of events and data
- Algebra skills adapting to providing solutions
- Statistics development and focus on 'real world' issues

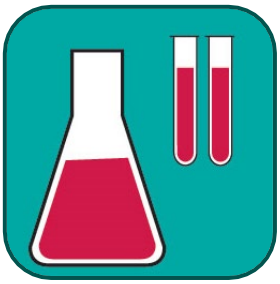
Where can this lead me?

Career Outcomes

- Nursing
- Physiotherapy
- Medicine
- Teaching
- Engineering
- Health

Course Pathways

This pathway provides a solid preparation for VCE Foundation and General Mathematics



CORE

YEAR 10

Science

Science is the study of how things work in the physical and natural world. In this year 10 course, we learn: how to harness chemical reactions, the fundamentals of genetics and the evolution of organisms, how forces and energy interact in moving objects, how advancements in technology are changing what we know about the Universe and how the world around us is part of a delicate ecosystem. We also learn how to conduct scientific experiments and perform in depth analyses and evaluations of scientific claims. All topics have a focus on real-world applications.
This subject prepares students with the scientific literacy to be able to make informed decisions as a global citizen as well as the scientific fundamentals to be able to progress to VCE science subjects.

What will I Learn?

Students will learn about these topics in Science:

- Biology – Evolution and Genetics
- Chemistry –Chemical Reactions
- Earth and Space Science – Space and Celestial Objects
- Physics – Energy Transfer and Transformation

What types of things will I do?

- Discover fascinating science concepts through a variety of activities including talks, videos, hands-on activities, independent and group work
- Conduct and observe a range of experiments, both inside and outside the science laboratory
- Plan a variety of investigations and experiments
- Undertake at least one research project similar to a VCE research task.

Where can this lead me?

Career Outcomes

- Scientist
- Doctor
- Engineer
- Nurse
- Marine Biologist
- Vet or Vet Nurse
- Teacher
- Physiotherapist

Course Pathways

VCE

- Biology
- Chemistry
- Psychology
- Physics

YEAR 10

Humanities

The Year 10 Humanities Curriculum has been designed to assist learners to navigate our 21st Century information-rich world and to gain important background knowledge about our collective past, present, and future. Students will consider the causes, key events and effects of the Second World War. They will also learn about the methods used by Indigenous civil rights activists to advocate for rights and freedoms in Australia. In Geography, students explore worldwide variations in human wellbeing and in economic development, considering the many reasons for such variations including colonialism and conflict. Lastly, in Civics, students turn to Global Governance to learn about the important role Australia plays on the international stage.

What will I Learn?

- History – Second World War in Europe and the Holocaust
- History – Rights and Freedoms
- Civics/Economics – Global Governance
- Geography – Geographies of Human Wellbeing
- Research and media literacy skills
- Intercultural understanding and ethical reasoning

What types of things will I do?

- Interrogate sources of evidence including contemporary media
- Meet a Holocaust survivor: a witness to History
- Participate in virtual fieldwork
- Take part in a mock United Nations General Assembly
- Learnt to base my arguments on relevant and accurate evidence
- Participate in online discussion boards and virtual tours/experiences

Where can this lead me?

Career Outcomes

- Politician
- Lawyer
- Financial Advisor
- Researcher or Archivist
- Information Officer
- Journalist
- Academic/Teacher
- Environmental planner
- Historian

Course Pathways

VCE

- Business Management
- Legal Studies
- Geography
- History

SEMESTER SUBJECT

YEAR 10

Sports Science

FOUNDATIONS OF HEALTH AND HUMAN DEVELOPMENT

This course is broken into two semester subjects. In the Foundations of Health and Human Development unit, students study the various influences on health and human development across the lifespan. Topics that are covered include personal perspectives and priorities relating to health and wellbeing of Australians as well as the challenges and issues surrounding the use of health data and access to quality healthcare. Student Athletes also complete physical training sessions to further understand the influence physical activity has on health and wellbeing of individuals. This semester subject is an appropriate introduction to VCE Health and Human Development.

What will I Learn?

- Dimensions of health and health status
- Factors affecting health
- Areas of individual human development
- Health issues effecting Australians
- The human lifespan – infancy, youth, adulthood
- Australian healthcare system
- Aboriginal and Torres Strait Islander health and wellbeing

What types of things will I do?

- Class debates
- Analyse data about Australia's health
- Research and analyse health inequalities In various population groups
- Analyse case studies based on real life scenarios
- Discuss rights and responsibilities to access health care
- Strength and conditioning sessions

Where can this lead me?

Career Outcomes

- Nutritionist
- Childcare
- Education
- Youth Work
- Social Work
- Pediatric care
- Medicine
- Aged Care

Course Pathways

VCE	Health and Human Dev. Physical Education
VM	Sport Science Academy Course

SEMESTER SUBJECT

YEAR 10

Sports Science

FOUNDATIONS OF PHYSICAL EDUCATION

This course is broken into two semester subjects. In the Foundations of Physical Education unit, students gain a thorough understanding of the body and how it can be trained to improve sporting performance. Students study the effects that different exercises have on the body and how to design a program that is tailored to particular sports. They also explore how the musculoskeletal and cardiovascular systems work together to produce movement and how the systems adapt and adjust to the demands of activity. Student Athletes complete practical sessions to practice and reinforce concepts from theoretical classes. This unit directly assists in gaining fundamental knowledge and understanding for VCE Physical Education.

What will I Learn?

- Musculoskeletal system
- Cardiovascular system
- Influences on physical activity
- Fitness and training principles
- Acute and chronic adaptations to the musculoskeletal and cardiovascular systems due to exercise
- Practices to enhance functioning of body system

What types of things will I do?

- Strength and conditioning sessions
- Analyse acute adaptations to exercise
- Designing and implementing training programs to assist with adaptations to exercise
- Use technology to analyse the functioning of body systems including heart rate monitors, spirometers and oxygen deficit masks

Where can this lead me?

Career Outcomes

- Sports Science
- Sports Psychologist
- Education
- Coaching
- Gym Instructor
- Massage Therapist
- Myotherapy
- Sports Development

Course Pathways

VCE	Physical Education
VET	Sport and Recreation
VM	Sport Science Academy Course

UNITS 1 - 4

VET Certificate III Sport & Recreation

This subject is a unique opportunity for students to explore all aspects of a future career in the Sport and Recreation Industry. The Certificate III in Sport and Recreation (VCAA Program 3) is the most popular VET in schools' course, delivered over two-years. This course offers students a vocational qualification as well as VCE Units 1 to 4.

Students will develop the skills and knowledge required to support the operation of facilities and assist in conducting sport and recreation programs as well as develop a comprehensive understanding of the Sport and Recreation industry.
This program is an examinable subject and students complete a VCAA exam at the end of the Units 3 and 4 sequence.
On successful completion of this course, students will obtain Certificate III in Sport and Recreation, Four VCE units and an ATAR contribution.

As part of the program, students are strongly recommended to complete 80 hours of Structured Workplace Learning in the Sport and Recreation industry.

Unit Outlines

Unit 1 & 2	Students will gain an understanding of the policies, procedures, skills and knowledge needed to work and excel in the Sport and Recreation industry. This will include topics such as how to provide customer service and organise a sport and recreation workplace, how to be a creative thinker and how to utilise social media in the industry. They will also take an in depth look at what it takes to be a successful coach. As well as completing a unit on workplace health and safety, students will receive external training in responding to emergency situations and applying basic first aid.
Unit 3 & 4	With an overall focus of working in the sport and recreation industry, students will complete a fitness unit where they will acquire the skills and knowledge needed to develop and apply a resistance training program. They will learn how to promote sport and recreation programs, how to plan and conduct sport and recreation sessions and how to develop warm up and cool down programs. Students will also discover how to work effectively with groups of people, manage conflict and undertake a risk analysis.

Levels of Achievement

- Unit 3 School Assessed Coursework and VETis competency completion
- Unit 4 School Assessed Coursework and VETis competency completion
- End of Year Examination

Career Pathways

- Exercise Science
- Sports Psychology
- Swim Teacher
- After school sports programs
- Sport and Recreation Officer
- Sports Event Manager
- Coaching
- Pool Lifeguard
- Personal Trainer
- Sports Administration

CHOOSING YOUR LEARNING PATHWAY:
VCE, VCE-VM or VPC

Before making decisions about VCE, VCE – Vocational Major (VCE-VM), Victorian Pathways Certificate (VPD) and VET programs/subjects, Year 9 and 10 students have participated in and investigated various career paths through Careers Days. After these events, students are directed to complete their Career Action Plan.

Students should keep in mind the following in selecting a course (VCE or VCE VM) and appropriate subjects including VET:

- Careers and tertiary courses that interest them
- Subjects they are good at, enjoy and likely to do well in
- Subjects that interest them

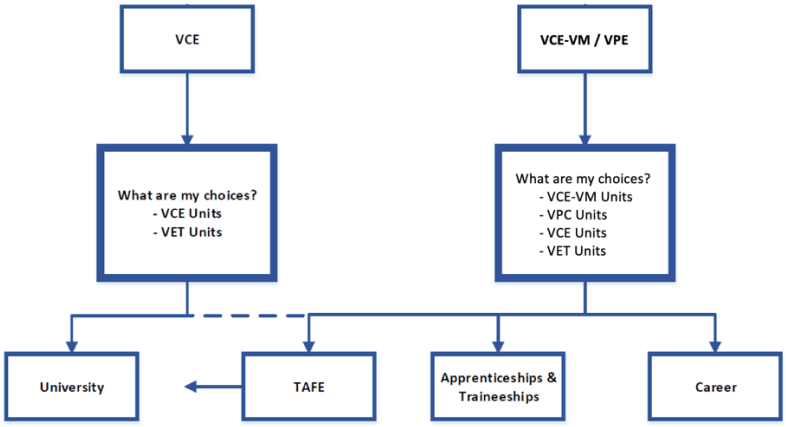
Students also need to have an awareness of:

- Year 11 and 12 pre-requisite subjects that they must have successfully completed in order to be accepted into University courses as there are subjects you need to complete in order to gain admittance into a specific course. Without these subjects and a study score universities cannot offer you a place. Specific information is available on the VTAC website, www.vtac.edu.au/
- Whether they are Australian Citizens as will impact the cost of courses.

Students should also be mindful of whether:

- They want to attend university: 3 or more years
- They want to attend TAFE: 6 months onwards

The diagram below indicates the certificate choices available at The Grange P–12 College and how these options interconnect. Your learning program may be developed by combining a range of the available options in a variety of ways.



Options	VCE Program	VCE-VM Program	VET Studies
Homework Demands	Demanding (1-4 hours homework per night)	Moderately demanding (1 hour per night)	Ranges from moderate to very demanding depending on individual units
Teaching and Learning Styles	Based predominantly on theoretical & analytical learning of key knowledge	Applied & active learning applicable to workplace	Combination of applied and active learning based on achieving a level of competency
Pathways	University entrance, TAFE apprenticeship or employment	TAFE/ trainee/ apprenticeship or employment	University, TAFE / trainee / apprenticeship or employment
Student Attributes	Highly motivated towards chosen tertiary studies	Students who are self-motivated towards specific vocation	Student enjoys combining active and theoretical learning styles
Enrolment and Student Materials Fees	Student material fees are applicable	Students materials fees are applicable	Enrolment fees are applicable for each unit for each year of study

Senior School Program and Pathways

The Grange P-12 College is focused on providing students with advice and direction regarding their career pathways. The College commitment to engaging young people in these critical decisions are reflected in commitment to a full-time specialist staff member who is highly accessible to students throughout the schooling day.

Students are provided with extensive counselling from within the college, including speciality career expo's, visits to universities and access to TAFE tours and 'tasters'.

The Grange P-12 College supports students wishing to explore the world of work through our work experience program. The College has forged links with local businesses committed to providing students with the necessary skills to succeed in the workforce. (Please see the Careers Teacher in the Careers Office for further information).

Career Investigation – 'myfuture' website

The 'myfuture' website (https://myfuture.edu.au/) provides students the opportunity to investigate future career options. The website contains links to:

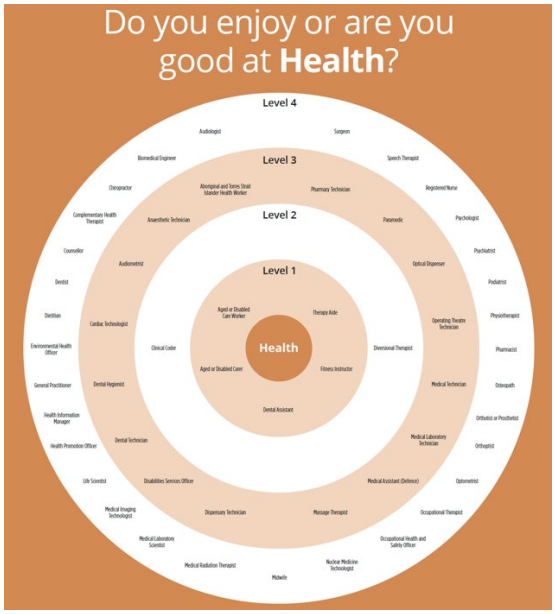
- My Career Profile – activities
- Descriptions of a range of courses, occupations, and industries
- Career bullseyes (see below)
- Career articles and stories
- Job seeker resources
- Use guide videos

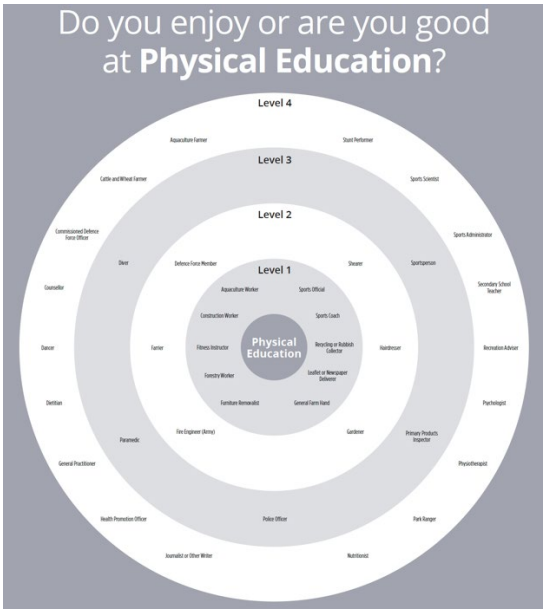
SCAN THE QR CODE myfuture

Students require an 'Edupass' log in, available from the school.

There are over 30 'bullseyes' available on the website. They are designed around 4 levels:

- Level 1: usually a level equal to the completion of Year 10 or Senior Certificate (VCE, VCE-VM), Certificate I and II level
- Level 2: usually a level equal to a Certificate III or IV, Australian apprenticeship
- Level 3: usually requires a level of skill equal to a Diploma or Advanced Diploma. Study is often taken through TAFE organisations. Some universities offer studies at this level
- Level 4: usually requires a level of skill to a Bachelor degree or higher qualification. Study is undertaken at a university.





English	Mathematics	Science	Humanities
VCE English (Core for all students) Units 1 - 4	VCE Foundation Mathematics Units 1 - 4	VCE Biology Units 1 - 4	VCE Business Management Units 1 - 4
VCE EAL English (Core for all EAL students) Units 1 - 4	VCE General Mathematics Units 1 – 4	VCE Chemistry Units 1 – 4	VCE Legal Studies Units 1 - 4
VCE - VM Literacy Year 11	VCE Maths Methods CAS Units 1 - 4	VCE Physics Units 1 - 4	VCE Modern History and Australian History Units 1 - 4
Senior Literacy Year 12	VCE - VM Numeracy Year 11	VCE Psychology Units 1 - 4	VCE Geography Units 1 – 2
	Senior Numeracy Year 12	Information Technology	
		VCE Applied Computing & Data Analysis Units 1 - 4	

Health and Physical Education	The Arts	Specific VET Programs	Specific VCE-VM and VPC Programs
VCE Health and Human Development Units 1 - 4	VCE Studio Arts Units 1 – 4	VET Sport & Recreation Year 1 & 2	VCE - VM Personal Development Skills Year 11
VCE Physical Education Units 1 - 4	VCE Visual Communication Design Units 1 – 4	VET Screen & Media Year 1 & 2	Senior Personal Development Skills Year 12
VCE Food Studies Units 1 - 4	VCE Media Units 1 – 4	VET Kitchen Operations Year 1 & 2	VCE - VM Work Related Skills Year 11
		VET Automotive Year 1 & 2 (VM only)	Senior Work Related Skills Year 12
		VET Building and Constructions Year 1 & 2 (VM only)	Structured Workplace Learning
		VET Make-Up Year 1 & 2 (VM only)	
		Cluster VETs – Refer to VET section of the Handbook.	

VOCATIONAL EDUCATION & TRAINING

VET

What is VET?

Vocational Education and Training refers to enhanced senior school studies, which enable a secondary student to combine their VCE studies with vocational training. VET is usually a two-year program combining general VCE studies with accredited Vocational Education and Training. It enables students to complete a nationally recognised Vocational Qualification (e.g., Certificate III Sport and Recreation) and VCE/VCE-VM at the same time. It provides the opportunity to trial a career and helps students explore possible areas of interest which promote further study and work choices. VET allows students to go directly into employment or receive credit towards further TAFE study.

Contribution to the VCE and ATAR

VET is fully incorporated into the VCE.

- VET programs usually have a Unit 1 - 4 structure.
- Of the 16 units that make up the VCE, a number can be VET units.
- VET Sport and Recreation contributes directly to the ATAR with a study score derived from scored assessment OR as 10% increment as a 5th or 6th subject. However, in some instances there is nil contribution towards ATAR when Units are at 1 and 2 level only.

For more information you can access the Victorian Curriculum and Assessment (VCAA) website.

Contribution to VCE-VM

- Contributes to the satisfactory completion of the VCE-VM - Industry Specific Skills
- 100 hours of VET gains one VCE-VM credit. This usually represents one semester of classes.
- Structured Workplace Learning (SWL): Students undertake work with an employer that enables the student to demonstrate their acquired skills and knowledge in an industry setting. During the Structured Workplace Learning, a student will have specific tasks to undertake to demonstrate competence. Students will be regularly monitored and may be assessed on the job.

Advantages of Studying VET

- Upon successful completion of the program, students are awarded a nationally accredited Vocational Training Certificate.
- VET qualification articulates directly into further education and training at TAFE.
- VET prepare students for the workforce, expanding post school opportunities.
- Provides the opportunity to trial a career. Helps students explore possible areas of interest, which promote further study and work choices.
- Allows students to develop strong links with industry and local community employers.
- Helps students gain knowledge of employer's expectations and real working conditions.
- Assists the transition from school to work.

VCE

VICTORIAN CERTIFICATE OF EDUCATION

VCE

The Sports Science Academy has a very structured learning pathway at VCE that lends itself to a wide range of Tertiary Education options. This is designed to complement study that has already occurred in the Sports Science Academy and aid the academic achievement of students during their VCE at The Grange P-12 College. It should be noted that this pathway accounts for the common pre-requisite subjects required in some Tertiary pathways.

Studies and Units

- Most studies have four units. Each unit lasts one semester, or half-year.
  - Units 1 & 2 are usually taken in Year 11.
  - Units 3 & 4 are usually taken in Year 12.
- Students may take Units 1 & 2 as single units – that is, just the Unit 1 or just the Unit 2 – Students must take Units 3 & 4 as a sequence (that is Unit 4 follows Unit 3).
- The VCE program is the complete list of VCE units done over two years (Year 11 & 12). It is recommended that students consider as broad a VCE as possible to provide flexible pathways.
- Usually, this list will consist of 20 to 24 units (or five to six studies, each of four units).
- The minimum to satisfy successful completion of VCE is 16 units across Year 11 & 12.
- Regardless of how many Units students do altogether, you must receive satisfactory completion of at least three units of English and the sequence of English Units 3 & 4, plus a sequence of Units 3 & 4 in three studies apart from English.

Assessment and Reporting

- Judgements about satisfactory completion are based on learning outcomes.
- Each VCE unit of study has between two and four outcomes.
- For all studies, the school decides whether you have satisfactorily completed a unit by achieving the learning outcomes.

Level of Performance

- For Units 1 & 2, there are specific tasks called School Assessed Course (SAC's) that are set by subject teachers, which will measure your level of performance.
- For Units 3 & 4, there are additional types of assessment, for which you get grades as well as an 'S' or an 'N'.

These graded assessments are either school assessed or examinations. Each VCE study has two or three graded assessments over Units 3 & 4, a combination of school assessments and examinations.

School Assessment

There are two kinds of school assessment. The first is called School Assessed Coursework (SACs). This assesses how you have performed the Learning Outcomes specified in the Study Design. The second is called a School Assessed Task (SAT). This kind of task will follow the specifications set by the Victorian Curriculum Assessment Authority and is generally in subjects requiring a practical component e.g. The Arts & Technology studies.

VCE English: Units 1 and 2

ATAR Improvement Strategy

Students enrolled in VCE English Units 1 and 2 have the advantage of extra instructional time in order to maximize their score. English is the only compulsory subject in the VCE two-year Certificate course – and as such, the score will automatically constitute part of the final ATAR. It is vital, therefore, that all students are working to their full potential and accessing appropriate support in this subject in particular.

VCE English at Units 1 and 2 is undertaken over 6 periods per week, which includes one designated period of Technical English conducted during Period 7. This component of the English course will comprise of a skills-based extension program with the aim of boosting students' study score in this subject. Many universities require a minimum study score of 25 in English and 30 in EAL for admission to courses, so the program will be designed to equip students with the necessary literacy and critical thinking skills for further study in a range of contexts.

SPORTS SCIENCE ACADEMY

PATHWAY INTO VCE

YEAR 7 SPORT SCIENCE ACADEMY	YEAR 8 SPORT SCIENCE ACADEMY	YEAR 9 SPORT SCIENCE ACADEMY	YEAR 10 SPORT SCIENCE ACADEMY	11 VCE SPORT SCIENCE ACADEMY	12 VCE SPORT SCIENCE ACADEMY
ENGLISH (6 Sessions)	ENGLISH (6 Sessions)	ENGLISH (6 Sessions)	ENGLISH (5 Sessions)	ENGLISH Unit 1 & 2 (6 Sessions)	ENGLISH Unit 3 & 4 (6 Sessions)
MATHS (6 Sessions)	MATHS (6 Sessions)	MATHS (6 Sessions)	MATHS (5 Sessions)	MATHS UNIT 1 & 2 CHOICE: - FOUNDATION - GENERAL - METHODS (5 Sessions)	MATHS UNIT 3 & 4 CHOICE: - FOUNDATION - GENERAL - METHODS (6 Sessions)
SCIENCE (4 Sessions)	SCIENCE (4 Sessions)	SCIENCE (3 Sessions)	SCIENCE (5 Sessions)	BIOLOGY or PSYCHOLOGY or BUSINESS MANAGEMENT Unit 1 & 2 (5 Sessions)	BIOLOGY or PSYCHOLOGY or BUSINESS MANAGEMENT Unit 3 & 4 (6 Sessions)
HUMANITIES (3 Sessions)	HUMANITIES (3 Sessions)	HUMANITIES (4 Sessions)	HUMANITIES (5 Sessions)	HEALTH AND HUMAN DEVELOPMENT Unit 1 & 2 (5 Sessions)	HEALTH AND HUMAN DEVELOPMENT Unit 3 & 4 (6 Sessions)
HEALTH & PE (3 Sessions)	HEALTH & PE (3 Sessions)	HEALTH & PE (3 Sessions)	SPORTS SCIENCE) (5 Sessions)	PHYSICAL EDUCATION Unit 1 & 2 (5 Sessions)	PHYSICAL EDUCATION Unit 3 & 4 (6 Sessions)
SPORTS SCIENCE (5 Sessions)	SPORTS SCIENCE (5 Sessions)	SPORTS SCIENCE (4 Sessions)	VET SPORT AND RECREATION Unit 1 & 2 (5 Sessions)	VET SPORT AND RECREATION Unit 3 & 4 (5 Sessions)	
ART / FOOD (3 Sessions)	ART / FOOD (3 Sessions)	ANATOMY & PHYSIOLOGY / ELECTIVE SUBJECT (4 Sessions)			

VCE

English

This study aims to develop competence in the understanding and use of English for a variety of purposes sufficient to meet the demands of post-school employment, further education and participation in a democratic society. It emphasises the integration of reading, writing, speaking, listening and thinking. It values student diversity and particularly encourages learning in which students take responsibility for their language development and thus grow in confidence and in language skill and understanding.

Structure

This study is made up of four units:

Unit 1	Area of Study 1 – Reading and Exploring Texts Area of Study 2 – Crafting Texts
Unit 2	Area of Study 1 – Reading and Exploring Texts Area of Study 2 – Exploring Argument
Unit 3	Area of Study 1 – Reading and Creating Texts Area of Study 2 – Analysing Argument
Unit 4	Area of Study 1 – Reading and Comparing Texts Area of Study 2 – Presenting Argument

Unit Outlines

Unit 1	The focus of this unit is on reading and exploring a variety of texts. Students also produce their own texts, paying careful attention to context, audience and purpose.
Unit 2	The focus of this unit is on analysing the construction of texts, and exploring the ways in which argument and language are used to position an audience. Students also deliver an oral presentation on a topic of their choice.
Unit 3	In this unit, students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language.
Unit 4	In this unit, students compare the presentation of ideas, issues and themes in texts. They create an oral presentation intended to position audiences about an issue currently debated in the media.

Levels of Achievement:	Career pathways include:	
Unit 3 School Assessed Coursework	° Journalism, media	° Professional writing and editing
Unit 4 School Assessed Coursework	° Publishing	° Advertising and marketing
End of Year Examination	° Creative writing	° Government and public service

VCE Mathematics Overview

Mathematics is the study of function and pattern in number, logic, space and structure. It provides both a framework for thinking and a means of symbolic communication that is powerful, logical, concise and precise. It also provides a means by which people can understand and manage their environment. Essential mathematical activities include calculating and computing, abstracting, conjecturing, proving, applying, investigating, modelling and problem solving.

This study is designed to provide access to worthwhile and challenging mathematical learning in a way which takes into account the needs and aspirations of a wide range of students. It is also designed to promote student's awareness of the importance of mathematics in everyday life in a technological society, and confidence in making effective use of mathematical ideas, techniques and processes.

General Guide for Unit Selection

There are a number of different combinations of units or (pathways). These are described below. Discuss what would best suit you with your Maths Teacher, Careers Leader, Parents and others before making your selection.

Please note that in the calculation of students' ATARs no more than two subjects of Year 12 Mathematics can contribute to the ATAR primary four.

Package	Career Pathways include:	No. of units	Year level
Foundation Maths 1&2 Foundation Maths 3&4	Maths for VET, VCE-VM and apprenticeships	4	11 12
General Maths 1&2	Apprenticeships, Nursing, Art, Music	2	11
General Maths 1&2 General Maths 3&4	Courses for Commerce, Biology, Sciences, Nursing, Teaching and some other Tertiary courses	4	11 12
General Maths 1&2 Further Maths 3&4 Maths Methods CAS 1&2 Maths Methods CAS 3&4	Courses for Commerce, Biological Sciences, Nursing, Teaching and some other tertiary courses	8	11 12 11 12
Maths Methods CAS 1&2 Maths Methods CAS 3&4	Provide widest choice and strongest background. Medicine, Engineering, Health Sciences and Computing Mathematics	2	11 12

UNITS 1 & 2

CHOOSE 1 MATHS

VCE

Foundation Mathematics

Foundation Mathematics Units 1 & 2 are designed to be widely accessible and provide the continuing of mathematic development of students entering VCE needing mathematical skills to support their other VCE subjects including VET studies and who wish to undertake Foundation maths at Unit 3 and 4 at Year 12. It focuses on providing students with the mathematical knowledge, skills, understanding and dispositions to solve problems in real context for a range of workplace, personal, further learning, and community settings relevant to contemporary society. Students undertake mathematical investigations over a two-week period allowing students to apply the key knowledge and skills developed throughout the units through real life scenarios. Students will formulate, explore and communicate their ideas.

Structure

The study is made up of 4 Units each containing the following Areas of Study:

Area of Study 1	Algebra, number, and structure
Area of Study 2	Data analysis, probability, and statistics
Area of Study 3	Financial and consumer mathematics
Area of Study 4	Space and measurement

Unit Outlines

Unit 1	This unit focuses on providing students with the mathematics knowledge, skills, understanding and dispositions to solve problems in real contact for a range of workplace, personal, further learning and community settings relevant to contemporary society.
Unit 2	The focus of Unit 2 is on extending, breadth and depth in the application of mathematics to solving practical problems from context present in students' other studies, work and personal or other familiar situations.
Unit 3 & 4	These units focus on extending the skills learnt in Unit 1 and 2. The units build on students' mathematical knowledge and skills and understanding to solve problems in real context for a range of workplace, personal, further learning, community and global settings relevant to contemporary society.

Levels of Achievement

- Unit 3 school assessed Coursework
- Unit 4 school assessed Coursework
- End of Year Examination

Career pathways include:

- Apprenticeships
- Electrical
- Hospitality
- Plumber
- Makeup artist
- Health Professional
- Hairdresser
- Designer

UNITS 1 - 4

CHOOSE 1 MATHS

VCE

Further Mathematics

General Mathematics Units 1 and 2 cater for a range of student interests, provide preparation for the study of VCE General Mathematics at the Units 3 and 4 level and contain assumed knowledge and skills for these units. students apply techniques, routines and processes involving rational and real arithmetic, sets, lists, tables and matrices, diagrams and geometric constructions, algorithms, algebraic manipulation, recurrence relations, equations, and graphs, with and without the use of technology. Students undertake mathematical investigations over a two-week period allowing students to apply the key knowledge and skills developed throughout the units using real life scenarios. Students will formulate, explore, and communicate their ideas.

Areas of Study

The study is made up of 4 Units each containing the following Areas of Study:

Area of Study 1	Data analysis, probability, and statistics and Algebra, number, and structure
Area of Study 2	Functions, relations, and graphs and Discrete mathematics
Area of Study 3	Data analysis probability, and statistics and Recursion and Financial Modelling
Area of Study 4	Matrices and Networks and decisions

Unit Outlines

Unit 1 & 2	In these units students study a range of mathematical concepts including: the association between two numerical variables, scatterplots, and lines of good fit by eye and their interpretation; use of graphs and networks to model and solve a range of practical problems, including connectedness, shortest path, and minimum spanning trees; direct and inverse variation, transformations to linearity and modelling of some non-linear data; measurement, accuracy, computations with formulas for different measures, similarity and scale in two and three dimensions.
Unit 3 & 4	These units focus on real-life application of mathematics and consist of the areas of study as listed above. Students apply techniques, routines and processes involving rational and real arithmetic, sets, lists, tables and matrices, diagrams, networks, algorithms, algebraic manipulation, recurrence relations equations, and graphs. They use technological and by-hand approaches to estimation and computation.

Levels of Achievement

- Unit 3 school assessed Coursework
- Unit 4 school assessed Coursework
- Two End of Year Examination

Examination 1 – Multiple Choice

Examination 2 – Written responses

Career pathways include:

- Accounting
- Architect
- Nursing
- Teacher
- Computer analysis/programming
- Engineering
- Health Professional
- Designer

UNITS 3 & 4

CHOOSE 1 MATHS

VCE

Maths Methods CAS

Mathematical Methods CAS is a demanding course which significantly extends students' knowledge in key areas of Algebra, Functions, Graphs and also introduces them to the fundamental ideas of Transformational Geometry (including Matrix Methods) and Calculus, Extensive use will be made of the TI-nspire CAS calculator. Any student undertaking Mathematical Methods CAS should have a strong background, particularly in Algebra, and should have achieved at least above average results for Semester 1 and 2 examinations in Year 10 and completed Introduction to Mathematical Methods at Year 10.

Areas of Study

The study is made up of 4 Units each containing the following Areas of Study:

Area of Study 1	Functions, relations and graphs
Area of Study 2	Algebra, number and structure
Area of Study 3	Calculus
Area of Study 4	Data analysis, probability and statistics

Unit Outlines

Unit 1 & 2	Units 1 and 2 focuses on the study of simple algebraic functions, in the Areas of Study listed above. The focus of Unit 2 is the study of simple transcendental functions, the calculus of polynomial functions and related modelling applications.
Unit 3 & 4	Units 3 and 4 extend the introductory study of simple elementary functions of a single real variable to include combinations of these functions, algebra, calculus, probability and statistics, and their applications in a variety of practical and theoretical contexts.

Levels of Achievement

- Unit 3 school assessed Coursework
- Unit 4 school assessed Coursework
- End of Year Examination
  - Examination 1 – Short answer and extended response
  - Examination 2 – Multiple choice and extended response

Career pathways include:

- Medicine
- Pilot
- Surveyor
- Veterinarian
- Architect
- Engineering
- Statistician
- Scientist

VCE

Health & Human Development

The central focus of Health and Human Development study is to examine the factors that promote health wellbeing in individuals, families and communities.

Structure

The study is made up of 4 Units:

Unit 1	Understanding Health and Wellbeing
Unit 2	Managing Health and Development
Unit 3	Australia's Health
Unit 4	Global Health and Human Development

Unit Outlines

Unit 1 This unit looks at health and wellbeing as a concept with varied and evolving perspectives and definitions. It takes the view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. Wellbeing is a complex combination of all dimensions of health, characterised by an equilibrium in which the individual feels happy, healthy, capable and engaged.

Unit 2 This unit investigates transitions in health, wellbeing and development from lifespan and societal perspectives. Students look at changes and expectations that are part of the progression from youth to adulthood as well as the Australian healthcare system and extend their capacity to access and analyse health information. They investigate the challenges and opportunities presented by digital media and technologies, and consider issues surrounding the use of health data and access to quality health care.

Unit 3 This unit focuses on the health status of Australians and the way it is measured. Regardless of how health is measured, health is not shared equally by all Australians. Different levels of health are experienced by different groups, which can be attributed to biological, behavioural and social determinants of health. Different approaches to health issues are examined including government responsibilities.

Unit 4 This unit takes a global perspective on achieving sustainable improvements in health and human development. There is a significant focus of Sustainable Development Goals, which are made to combat poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women. Students study facts that influence differences between developed and developing countries including Government and Non-Government Organisations.

Levels of Achievement

- Unit 3 school assessed Coursework
- Unit 4 school assessed Coursework
- End of Year Examination

Career pathways include:

- Childhood Development
- Family Studies
- Nutrition/Dietetics
- Community Services/Youth Studies
- Health Promotion

UNITS 1- 4

VCE

Physical Education

Physical Education examines the biological, social and cultural influences on performance and participation in physical activity. Theory and practice are integrated in this study, which is approached through both the study of, and participation in, physical activity. **Please be aware that this course is based heavily on theory and has minimal practical time.**

Structure

The study is made up of 4 Units:

Unit 1	The Human Body in Motion
Unit 2	Physical Activity, Sport and Society
Unit 3	Movement skills and energy for physical activity
Unit 4	Training to improve performance

Unit Outlines

Unit 1 Students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement and how the systems adapt and adjust to the demands of the activity. Students also evaluate the social, cultural and environmental influences on movement. They consider the implications of the use of legal and illegal practices that enhance the musculoskeletal and cardiorespiratory systems, and study strategies to minimise the risk of illness or injury to each system.

Unit 2 Students are introduced to types of physical activity and the role that physical activity and sedentary behaviour plays in their own and various population groups' health. They explore a range of factors that influence and facilitate participation in regular physical activity and investigate individual and population-based consequences of physical inactivity and sedentary behaviour. Students study methods to assess and analyse data relating to physical activity and sedentary behaviour levels of individuals and populations.

Unit 3 This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and techniques to analyse movement skills and apply biomechanical and skill acquisition principles to improve and refine movement in physical activity, sport and exercise.

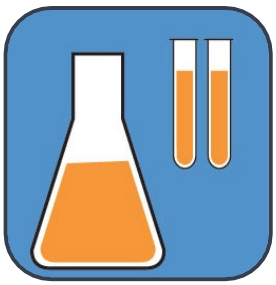
Unit 4 Students analyse movement skills from a physiological, psychological and sociocultural perspectives, and apply relevant training principles and methods to improve performance within activity at an individual, club and elite level. Students analyse skill frequencies, movement patterns, heart rates and work to rest ratios to determine the requirements of activity.

Levels of Achievement

- Unit 3 school assessed Coursework
- Unit 4 school assessed Coursework
- End of Year Examination

Career pathways include:

- Human Movement
- Sport Psychology
- Sports Marketing
- Exercise Science
- Education
- Physiotherapy
- Sports Administration
- Sports Medicine



UNITS 1- 4

CHOOSE ONE

VCE

Biology

Biology is a diverse and evolving science discipline that seeks to understand and explore the nature of life, past and present. Despite the diversity of organisms and their many adaptations for survival in various environments, all life forms share a degree of relatedness and a common origin. The study explores the dynamic relationships between organisms and their interactions with the non-living environment. It also explores the processes of life, from the molecular world of the cell to that of the whole organism, that maintain life and ensure its continuity. All units involve designing and performing experiments.

Structure

The study is made up of 4 Units:

Unit 1	How do living things stay alive?
Unit 2	How is continuity of life maintained?
Unit 3	How do cells maintain life?
Unit 4	How does life change and respond to challenges over time?

Unit Outlines

Unit 1	In this unit students are introduced to some of the challenges to an organism in sustaining life. Students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism. Students investigate how a diverse group of organisms form a living interconnected community that is adapted to, and utilised, the abiotic resources of its habitat.
Unit 2	In this unit students focus on cell reproduction and the transmission of biological information from generation to generation. They examine the process of DNA replication cell division. Students use chromosome theory and terminology from classical genetics to explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts, and predict outcomes of genetic crosses.
Unit 3	In this unit students investigate the workings of the cell from several perspectives. They explore the importance of the insolubility of the plasma membrane, the importance of molecular interactions based on the complementary nature of specific molecules, the synthesis, structure and function of nucleic acids and proteins as key molecules in cellular processes and the nature of biochemical pathways.
Unit 4	In this unit students consider the continual change and challenges to which life on Earth has been subjected. They investigate the relatedness between species and the impact of various change events on a population's gene pool. Students examine the structural and cognitive trends in the human fossil record and the interrelationships between human biological and cultural evolution.

Levels of Achievement

- Unit 3 school assessed Coursework
- Unit 4 school assessed Coursework
- End of Year Examination

Career pathways include:

- Pharmaceutical researcher
- Medical Laboratory Assistant
- Teacher
- Veterinarian
- Biotechnologist
- Biomedical Engineer
- Doctor
- Forensic Scientist

UNITS 1- 4

CHOOSE ONE

VCE

Psychology

Psychology is a broad discipline which incorporates the scientific study of the mind and of human behaviour. Students will examine 'what makes humans tick' through the behavioural, biological, and social perspectives and apply this knowledge to practical activities (experiments), theories and circumstances of everyday life. Students explore how people think, feel, and behave and gain valuable insights into human behaviour and a range of psychological health issues which face Australian society.

Structure

The study is made up of 4 Units:

Unit 1	How are behaviour and mental processes shaped?
Unit 2	How do external factors influence behaviour and mental processes?
Unit 3	How does experience affect behaviour and mental processes?
Unit 4	How is wellbeing developed and maintained?

Unit Outlines

Unit 1	Students investigate how the brain functions and examine the relationship between the mind, brain and human behaviour. Students also examine psychological development and consider the complex interplay between nature and nurture which leads us to become the person that we are. Students examine 'atypical' psychological development through a study of psychotic disorders and explore ideas about 'normality.' Students complete a self-directed research investigation.
Unit 2	Students examine how a person's thoughts, feelings and behaviours are influenced by a variety of factors: psychological and social. Students explore how perception of stimuli can be distorted and explore a range of factors which influence behaviour in social groups. Students undertake a practical investigation and draw conclusions from data.
Unit 3	Students investigate the manner in which experiences can affect behaviour and mental processes. Students also explore theories of memory, different levels of consciousness and sleep. Students complete a research investigation task.
Unit 4	Students explore the concept of a mental health continuum, investigate how mental health disorders are diagnosed and consider factors which contribute to mental wellbeing. Students complete a practical investigation.

Levels of Achievement

- Unit 3 school assessed Coursework
- Unit 4 school assessed Coursework
- End of Year Examination

Career pathways include:

- Psychologist
- Counselling
- Criminology
- Doctor
- Social Worker
- Lawyer

UNITS 1- 4

CHOOSE ONE

VCE

Business Management

Thinking of a career in the corporate sector about starting your own business? Want to undertake further study in management, marketing, commerce or finance at university or TAFE? Be prepared with VCE Business Management! Business Management examines the ways in which people at various levels within a business organisation manage resources to achieve key objectives. These units examine the theory and practice of managing different business types and sizes, through exposure to real business scenarios.

Structure

The study is made up of 4 Units:

Unit 1	Planning a Business
Unit 2	Establishing a Business
Unit 3	Managing a Business
Unit 4	Transforming a Business

Unit Outlines

Unit 1	In this unit students explore the factors affecting business ideas and the internal and external environments within which businesses operate, and the effect of these on planning a business.
Unit 2	This unit focuses on the establishment phase of businesses life. In this unit students examine the legal requirements that must be satisfied to establish a business. They investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping.
Unit 3	In this unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relationship between each of these. Students investigate strategies to manage both staff and business operations to meet objectives.
Unit 4	In this unit students consider the importance of reviewing key performance indicators to determine current performance and the strategic management necessary to position a business for the future. Students study a theoretical model to undertake change and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance. They investigate the importance of leadership in change management.

Levels of Achievement

- Unit 3 school assessed Coursework
- Unit 4 school assessed Coursework
- End of Year Examination

Career pathways include:

- Owner/small business manager
- Innovation and entrepreneur
- Advertising/publicity executive
- Tourism/hospitality management
- Business advisor/consultant
- Influencer/social media consultant

UNITS 3- 4

ADDITIONAL ELECTIVE

VCE

Food Studies

This study examines the background to the abundance of food in Australia and explores reasons for our food choices. Practical work includes cooking, demonstrations, creating and responding to design briefs, dietary analysis, food sampling, taste-testing, sensory analysis, product analysis and scientific experiments.

Structure

The study is made up of 4 Units:

Unit 1	Food Origins
Unit 2	Food Makers
Unit 3	Food in Daily Life
Unit 4	Food Issues, Challenges and Futures

Unit Outlines

Unit 1 This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time across the world. Students investigate cuisines that are part of Australia's culinary identity today and reflect on the concept of an Australian cuisine. They consider the influence of technology and globalisation on food patterns.

Unit 2 This unit investigates food systems in contemporary Australia. Students consider commercial food production industries and food production in small-scale domestic settings. Students use practical skills and knowledge to produce food and consider a range of evaluation measures to compare their foods to commercial products.

Unit 3 Students explore the science of food, the physical need for it and how it nourishes and can harm the body. They consider influences on food choices and how communities, families and individuals change their eating patterns over time to develop within social environments. Students also investigate the functional properties of food and the changes that occur during food preparation and cooking.

Unit 4 In this unit, students examine global and Australian food systems, issues about the environment, ecology, ethics, farming practices, the development and application of technologies, challenges of food security, food safety, food wastage, and the use of water and land. They practice and improve their food selection skills by interpreting food labels and analysing the marketing terms on food packaging.

Levels of Achievement

- Unit 3 School Assessed Coursework
- Unit 4 School Assessed Coursework
- End of Year Examination

Career Pathways

- Hospitality and Tourism Industry
- Dietician
- Food Manufacturing and Food Science
- Health Courses

VCE – VOCATIONAL MAJOR

VICTORIAN CERTIFCATE OF EDUCATION – VOCATIONAL MAJOR and VICTORIAN PATHWAYS CERTIFICATE

VCE-VM & VPC

The Victorian Government introduced two new certificates commencing in 2023, The Victorian Certificate of Education – Vocational Model (VCE-VM) and Victorian Pathways Certificate. They are designed to provide additional pathways for Years 11 and 12 students interested in vocationally orientated career options or moving straight into employment.

The certificates build on existing programs that many schools have developed in response to a recognised need for additional learning options in the Senior Years. They sit alongside the VCE and VET to provide students with a wider range of education and training pathways.

It must be noted the Victorian Pathways Certificate is designed for students who have not previously been engaged in education or who require additional support. It is not a senior certificate. Where students are enrolled in VPC, parent discussion and agreement will occur prior to commencement of the certificate. As a result, subject descriptions are not included in the handbook.

What is VCE-VM and VPC?

The certificates are typically for a 'hands on' learner whose pathway is leading towards employment, TAFE, or apprenticeship/ traineeship. The teaching team are responsible for your assessment as having met outcomes in a competent manner. Students will need to complete more than two tasks to show that each outcome has been met.

Students studying VCE – VM are required to undertake a combination of accredited modules and units selected from the following four compulsory strands:

- Literacy Skills
- Numeracy Skills
- Work Related Skills
- Personal Development Skills

Industry Specific Skills (VET)

Students in the Sports Science Academy are encouraged to undertake VET Sport and Recreation as their Vocational training. This subject begins at Year 10 and is completed in Year 11 as part of their learning pathway. Additionally, Year 11 & 12 students undertake VCE Units 1 & 2 study of Physical Education via their Sports Science class across the two years of the VCE-VM certificate.

Work Placement is a key component of The Grange P-12 College VCE-VM program at both Year 11 & 12. Students are encouraged to actively be involved in planning and arranging this work placement. Structured Workplace Learning is completed with two different organisations in the sporting field for approximately 10-week blocks.

SPORTS SCIENCE ACADEMY

PATHWAY INTO VCE-VM

YEAR 7 SPORT SCIENCE ACADEMY	YEAR 8 SPORT SCIENCE ACADEMY	YEAR 9 SPORT SCIENCE ACADEMY	YEAR 10 SPORT SCIENCE ACADEMY	11 VCE-VM SPORT SCIENCE ACADEMY	12 VCE-VM SPORT SCIENCE ACADEMY
ENGLISH (6 Sessions)	ENGLISH (6 Sessions)	ENGLISH (6 Sessions)	ENGLISH (5 Sessions)	ENGLISH (5 Sessions)	ENGLISH (5 Sessions)
MATHS (6 Sessions)	MATHS (6 Sessions)	MATHS (6 Sessions)	MATHS (5 Sessions)	MATHS (5 Sessions)	MATHS (5 Sessions)
SCIENCE (4 Sessions)	SCIENCE (4 Sessions)	SCIENCE (3 Sessions)	SCIENCE (5 Sessions)	PERSONAL DEVELOPMNENT SKILLS (5 Sessions)	PERSONAL DEVELOPMNENT SKILLS (5 Sessions)
HUMANITIES (3 Sessions)	HUMANITIES (3 Sessions)	HUMANITIES (4 Sessions)	HUMANITIES (5 Sessions)	WORK RELATED SKILLS (5 Sessions)	WORK RELATED SKILLS (5 Sessions)
HEALTH & PE (3 Sessions)	HEALTH & PE (3 Sessions)	HEALTH & PE (3 Sessions)	SPORTS SCIENCE FOUNDATIONS OF HHD/PE (5 Sessions)	SPORTS SCIENCE (5 Sessions)	SPORTS SCIENCE (5 Sessions)
SPORTS SCIENCE (5 Sessions)	SPORTS SCIENCE (5 Sessions)	SPORTS SCIENCE (4 Sessions)	VET SPORT AND RECREATION Unit 1 & 2 (5 Sessions)	VET SPORT AND RECREATION (5 Sessions)	STUDY SESSIONS - Structured Workplace Learning (5 Sessions)
ART / FOOD (3 Sessions)	ART / FOOD (3 Sessions)	ANATOMY & PHYSIOLOGY / ELECTIVE SUBJECT (4 Sessions)			

YEAR 11 & 12

Literacy

The purpose of the course is to enable learners to develop the skills and knowledge to read and write a range of texts on everyday subject matters which include some unfamiliar aspects or material.

YEAR 11: VCE VM Literacy focuses on the development of the knowledge and skills required to be literate in Australia today. The key knowledge and key skills encompass a student's ability to interpret and create texts that have purpose, and are accurate and effective, with confidence and fluency. Texts are drawn from a wide range of contexts and are focused on participating in the workplace and community.

Unit 1: There is a focus on literacy for personal use and understanding and creating digital texts. It does this by focusing on structures and features of a range of texts – print, visual and film – and the personal reasons people engage in these texts. Students will also develop their capacity to critically assess digital texts, including webpages for vocational and workplace settings, podcasts, and social media.

Unit 2: Students will build on the skills developed during Unit 1. They will also study the values and beliefs that underpin different perspectives and how these values create different biases and opinions, including thinking about how these issues might arise in particular vocational or workplace settings. They will engage with a range of content from print, visual, aural, and multimodal sources.

YEAR 12: The purpose of this unit is to enable students to develop the skills and knowledge to read and write complex texts. The texts will deal with general situations and include some abstract concepts or technical details. At this level, students produce texts that incorporate a range of ideas, information, beliefs, or processes and have control of the language devices appropriate to the type of text. In reading, the student identifies the views shaping the text and the devices used to present that view and express an opinion on the effectiveness and content of the text. In oral communication students use and respond to spoken language for self-expression, to impart knowledge of a particular issue, to explore issues and engage in problem solving, and to communicate for practical purposes.

At the end of the unit students will be able to read, comprehend and write a range of complex texts across a broad range of contexts. Students will be able to use and respond to spoken language with complex and abstract content across a broad range of contexts.

What will I Learn?

- To read a variety of texts
- To write a variety of texts
- Understand technical and abstract details
- Respond to spoken language
- Oral communication skills
- Exploration of issues

What types of things will I do?

- Short answer questions
- Explore issues
- Problem solving
- Production of texts
- Group discussions
- Oral presentations

Where can this lead me?

Course Pathways

- TAFE
- Employment
- Short Courses
- Apprenticeship
- Certificates III and IV

YEAR 11 & 12

Numeracy

VCE Vocational Major Numeracy focuses on enabling students to develop and enhance their numeracy skills to make sense of their personal, public, and vocational lives. Students develop mathematical skills with consideration of the local, national, and global environments and contexts and awareness and use of appropriate technologies. It empowers students to use mathematics to make sense of the world and apply mathematics in a context for a social purpose. This study allows students to explore the underpinning mathematical knowledge of number, quantity, measurement, shape, dimensions and directions, data and chance, the understanding of use of systems and processes, and mathematical relationships and thinking.

YEAR 11: Units 1 & 2: Students will develop their numeracy practices to make sense of the personal, public, and vocational lives. They develop mathematical skills with consideration of their local, community, national and global environments and contexts, and an awareness and use of appropriate technologies. These units provide students with the fundamental mathematical knowledge, skills, understandings, and dispositions to solve problems in real contexts for a range of workplace, personal, further learning, and community settings relevant to contemporary society.

YEAR 12: This course will focus on the application of Numeracy for practical purposes such as in the design, construction, and measurement of objects within the physical world. Personal organisation such as the management of time, money and locating destinations and directions will also be covered. Numeracy for interpreting society whereby statistical data will be collected, organised, analysed and interpreted will also be a key feature of the course. The development of mathematical skills for dealing with relationships between variables in real life contexts in order to solve problems using simple linear algebra will also be covered. Assessment will take place through a series of Outcomes and Assessment Tasks.

What will I Learn?

- Development of numeracy skills
- Measurement of objects
- Management of time
- Money management
- Analysing data
- Destination location
- Real life numeracy skills

What types of things will I do?

- Short answer problems
- Graphs and surveys
- Written tasks
- Problem solving
- Use of ICT
- Life and everyday workplace maths
- Mathematical calculations
- Manual calculations

Where can this lead me?

Course Pathways

- TAFE
- Employment
- Short Courses
- Apprenticeship
- Certificates III and IV

YEAR 11 & 12

Work Related Skills

VCE Vocational Major Work-Related Skills (WRS) examines a range of skills, knowledge, and capabilities relevant in achieving individual career and educational goals.

YEAR 11: Students will develop a broad understanding of workplace environments and the future of work and education, in order to engage in theoretical and practical planning and decision-making for a successful transition to their desired pathway. The study considers four key areas: the future of work; workplace skills and capabilities; industrial relations and the workplace environment and practice; and the development of a personal portfolio.

Unit 1: This unit recognises the importance of sourcing reliable information relating to future education and employment prospects to engage in effective pathway planning decision-making. Students will investigate information relating to future employment, including entry-level pathways, emerging industries and growth industries and trends, and evaluate the impact of pursuing employment in different industries. Students will reflect on this research in the context of their individual skills, capabilities, and education and/or employment goals. They will develop and apply strategies to communicate their findings.

Unit 2: Students will consider the difference between essential employability skills, specialist and technical work skills and personal capabilities, and understand the importance of training and development to support the attainment and transferability of skills. Students will collect evidence and artefacts relating to their personal skills and capabilities and promote them through resumes, cover letters and interview preparation.

YEAR 12: The purpose of the Work-Related Skills Strand is to develop employability skills, knowledge and attributes valued within community and work environments as a preparation for employment. The development of employability skills provides learners with a capacity to consider and choose from the range of pathways. The development of Occupational Health and Safety (OHS) knowledge provides learners with the necessary preparation for the workplace.

What will I Learn?

- Work as a team member
- Plan and organise activities
- Find and complete structured workplace learning
- Communication skills
- Problem solving
- Time management
- Self-management
- Pathway planning

What types of things will I do?

- Hazard analysis
- Teamwork
- Time management
- Industry investigation
- Careers research
- Plan, organise and manage
- Problem solving activities
- Compulsory Work Placement

Where can this lead me?

Course Pathways

- TAFE
- Employment
- Short Courses
- Apprenticeship
- Certificates III and IV

YEAR 11 & 12

Personal Development

VCE Vocational Major Personal Development Skills (PDS) takes an active approach to personal development, self-realisation, and citizenship by exploring interrelationships between individuals and communities.

YEAR 11: PDS focuses on health, wellbeing, community engagement and social sciences, and provides a framework through which students seek to understand and optimise their potential as individuals as members of their community. PDS explores concepts of effective leadership, self-management, project planning and teamwork to support students to engage in their work, community and personal environments.

Unit 1: This unit focuses on the development of personal identity and individual pathways to optimal health and wellbeing. Students will investigate the elements of emotional intelligence and begin to develop an awareness of interrelationships between communities and the health and wellbeing of individuals. This unit highlights the importance of critical and creative thinking and clear communication as individuals explore personal identity and the role of community.

Unit 2: This unit focuses on the benefits of community participation and how people can work together effectively to achieve a shared goal. Students will look at the relationships between active citizenship, empathy and connection to culture and individual health and wellbeing. Students will seek to understand different perspectives on issues affecting a community. They will reflect on relationships between community issues, social cohesion, and health and wellbeing, and the importance of clear information and communication.

YEAR 12: The purpose of this aspect of VCE-VM is to develop skills, knowledge and behaviours that enable improved self-confidence, increased self-esteem, and skills for civil and civic participation.

What will I Learn?

Transferrable skills including:

- Working in teams
- Conflict resolution
- Effective use of technology
- Task management
- Planning and organising
- Communication strategies
- Time management
- Problem solving

What types of things will I do?

- Group discussion
- ICT application
- Personal Project work
- Presentations
- Community Project work
- Written tasks

Where can this lead me?

Course Pathways

- TAFE
- Employment
- Short Courses
- Apprenticeship
- Certificates III and IV

YEAR 11 & 12

Sports Science

Through a combination of theory and practical classes, Student Athletes develop knowledge and understanding of the sporting industry and various workplace opportunities that are available to students through partnership programs including, but not limited to; Victoria University, Deakin University, Rugby Victoria, NRL Victoria, The North Melbourne Football Club, Wyndham Council and Belgravia Group. Student Athletes complete strength and conditioning practical classes as well as an education around the great outdoors while completing their Duke of Edinburgh Award as they give back to the community. Student Athletes gain detailed theoretical understanding of the human body in motion and physical activity's role in society.

What will I Learn?

- Correct movement techniques
- Workplace skills within the sports industry
- OHS policies within the sporting industry
- How to overcome challenges to succeed
- New skills and community links to be active
- How to run sporting events and programs
- How to coach children and peers in various sporting contexts

What types of things will I do?

- Strength and Conditioning sessions
- Personalised and group training programs
- Engagement in community awards including the Duke of Edinburgh – culminating in a camp
- One day per week of Structured Workplace Learning in an organisation of student interest
- Partnership sporting and mentoring programs
- Run sporting programs and events to children

Where can this lead me?

Career Outcomes	Course Pathways
Sport Coach	TAFE
Personal Trainer	Certificates III and IV
Gym Instructor	Apprenticeship
Sports Development	Short Courses
Event Manager	Employment
Sport and Recreation	
Professional Athlete	

Glossary of Educational Terms

ATAR	Australian Tertiary Admissions Rank. A score is generated from the students' study score.
GAT	A general knowledge examination undertaken by all students who are undertaking Units 3 or 4. The GAT is used by VCAA as means of verifying grades or deriving a score.
Learning Outcomes	Learning Outcomes are the basis of satisfactory completion of VCE units. There are approximately 2-4 Learning Outcomes per unit of study. Student must be able to demonstrate their achievement of each learning outcome.
Prerequisite subject	These are units that must be satisfactorily complete (or to stated standard) before a student is eligible for selection into a specific Tertiary course.
SAC	School Assessed Coursework are assessment tasks that are specified in the Study Design set by VCAA. Teachers set SACs that students must complete satisfactorily.
SAT	School Assessed Tasks are completed in subjects that produce a product or model. The Unit 3 & 4 work receives a score based on the quality of the work.
Study Score	A score out of 0-50, which sums up the student's total achievement in all work set in each unit of work. It is based on internal assessment and external examinations. Only applies to units 3 & 4.
Study Design	A 'study' is broken up into four units. Each VCE study unit is numbered 1, 2, 3 or 4. Student programs may include some Units 1 and 2 in the second or final year and/or some Units 3 and 4 in the first year. Study Designs, assessment advice and other teacher support materials relating to that study.
Trade Training Centre	Specialist facility established to provide training in current industry practices in designated high demand skill areas.
Unit	A self-contained study of approximately one semester or commonly referred to as a subject.
VCAA	Victorian Curriculum Assessment Authority – body responsible for the administration of VCE/ VCE-VM/VET in Schools.
VCE	Victorian Certificate of Education. A senior school certificate based mainly on theoretical learning.
VCE - VM	Victorian Certificate of Education – Vocational Major. A senior school certificated delivered using an applied learning approach
VPC	Victorian Pathway Certificate. A certificate designed for students previously not engaged in school or who require additional support. It is not a senior certificate.
VET	Vocational Education and Training. Industry endorsed certificates and comprised of units of competency enable students to achieve joint VCE and TAFE qualifications.
VTAC	The Victorian Tertiary Admissions Centre. The Centre processes student applications to the majority of tertiary institutions.

The Grange

P-12 COLLEGE