Year 11 and Year 12 2026 Course Guide



"You are the salt of the earth."
You are the light of the world."

- Matthew 5:13-16



CONTENTS

	PAGE
Introduction to Senior Secondary School	4
Useful Terminology	5
Choosing Your Courses	7
Students With Learning Support Requirements	8
WACE Requirements	9
Types Of Courses	10
ATAR Requirements	11
What Is Your Pathway?	12
Alternative Entry Pathways	14
LIST A COURSES AVAILABLE TO ELLENBROOK CHRISTIAN COLLEGE STUDENTS	
English Courses	
English (ATAR)	16
English (General)	17
Humanities Courses	
Humanities and Social Science in Action (General)	18
Modern History (ATAR)	19
Politics and Law (ATAR)	20
Arts Courses	
Media Production and Analysis (Film) (General)	21
Media Production and Analysis (Film) (ATAR)	22
Drama (General)	23
Drama (ATAR)	24
Dance (General)	25
Dance (ATAR)	26
Visual Arts (General)	27
Visual Arts (ATAR)	28
Music (General)	29
Food Science and Technology (General)	30
LIST B COURSES AVAILABLE TO ELLENBROOK CHRISTIAN COLLEGE STUDENTS	
Mathematics Courses	
Mathematics Specialist (ATAR)	31
Mathematics Methods (ATAR)	33
Mathematics Applications (ATAR)	35
Mathematics Essentials (General)	37

Sciences Courses	
Chemistry (ATAR)	39
Human Biology (ATAR)	40
Human Biology (General)	41
Biology (ATAR)	42
Physics (ATAR)	43
Psychology (ATAR)	44
Psychology (General)	45
Technology Courses	
Engineering (ATAR)	46
Engineering (General)	47
Computer Science (ATAR)	48
Computer Science (General)	49
Materials Design and Technology (Wood) (General)	50
Health and Physical Education Studies Courses	
Physical Education Studies (ATAR)	51
Physical Education Studies (General)	52
Vocational Education and Training (VET) Courses	53
VET Onsite Certificate II in Workplace Skills (BSB20120)	55
VET Onsite Certificate II in Sport and Recreation (SIS20122)	56
VET Onsite Certificate III in Business (BSB30120)	57
Endorsed Programs	58
Endorsed Program Curtin UniReady	59
Endorsed Program Authority Developed Workplace Learning (ADWPL)	60
Endorsed Program Authority Developed Community Service (ADCS)	62
Endorsed Program The Duke of Edinburgh's International Award	63

Introduction to

Senior Secondary School

Year 11 and Year 12 present students with new challenges and exciting experiences that prepare them for the appropriate pathways after they complete Year 12. We want to ensure that our students get the most out of their senior years at Ellenbrook Christian College. Therefore, it is vital that parents and students set some time aside to go through this course guide together so that they can make careful and informed decisions about subject selection and future pathways opportunities.

Making these choices can sometimes be daunting as students find a balance between courses that interest them and courses that they will achieve success in. We are here to help guide students through this process, so they make the best decision for their post-school futures. This handbook outlines the courses offered in Year 11 at Ellenbrook Christian College and explains how students can successfully receive their WACE (Western Australian Certificate of Education) after Year 12. Read this handbook thoroughly and refer to it often to clarify terminology, expectations, and requirements.

As students make the crucial transition from Year 10 to Year 11, they must understand the importance of their Year 11 and 12 education. Year 11 and 12 students at Ellenbrook Christian College are granted many privileges and in return, are expected to be responsible and respectable role models to younger students at our College by showing maturity and leadership.

We hope that the next two years will be an enjoyable learning experience for our students as they grow into young adults. When each student leaves Ellenbrook Christian College, we hope they will be prepared to take on the challenges of the wider world with the benefit of the character and values that are the heart of our College.



Useful Terminology

WACE	The Western Australian Certificate of Education is a certificate that demonstrate significant educational achievement over Year 11 and 12. It is generally reference for entry into further study and employment.		
Course	Most courses are at either General or ATAR level and comprise 4 units. Units 1 and 2 are studied in Year 11 and Units 3 and 4 are studied in Year 12.		
Unit	A semester long section of a course. Four units throughout Year 11 and 12 make up one course.		
A two year Australian Tertiary Admissions Rank (ATAR) course consisting Semester units covered in Years 11 and 12 with an external examinate and of Year 12. Students wanting to attend university through a direct pathaway must enrol in at least five ATAR courses, one of which must			
General Course	A two-year course consisting of 4 units covered in Year 11 and 12 which counts towards the WACE but not towards generating an ATAR.		
English Language Competence	Is attained upon: Successful completion of at least 4 English course units in Year 11 and 12, and Passing OLNA, or attaining 'Strong Proficiency Level' or higher in Year 9 Naplan for Reading and Writing		
The Online Literacy and Numeracy Assessment enables students to de CLNA that they meet the minimum standard of literacy and numeracy that is to receive their WACE.			
VET	Vocational and Educational Training is designed to deliver workplace skills and knowledge over a wide range of careers. This includes trade work, office work, retail, hospitality, and technology.		
TISC	The Tertiary Institutions Service Centre processes applications for admission into university undergraduate courses at the 4 public universities. For more info refer to: http://www.tisc.edu.au.		

TEA	The Tertiary Entrance Aggregate is the total of a student's best four ATAR subjects at the end of Year 12 which is used to calculate their final ATAR.		
WASSA	The Western Australian Statement of Student Achievement is issued to all Year 12 students who complete any study that contributes towards a WACE. It lists all courses and programs students have completed in Year 11 and 12.		
ATAR	The Australian Tertiary Administration Rank is a number between 0.00 and 99.95 which is based on a student's overall academic achievement. It shows their position relative to all other students in their year of study. For example, if a student receives an ATAR of 88.50 they know that they are in the top 11.5% of students in their year of study in Australia. ATAR is used for a direct entry into a tertiary institution.		
SCSA	The School Curriculum and Standards Authority is responsible for Kindergarten to Year 12 curriculum, assessment, standards and reporting for all Western Australian Schools.		
TAFE Colleges	Technical and Further Education Colleges or institutions provide a wide range of vocational tertiary education courses.		
Tertiary Institutions	In WA these include The University of Western Australia, Murdoch University, Curtin University, Edith Cowan University, and The University of Notre Dame. Students may also enrol in interstate tertiary institutions.		

Choosing Your Courses

- **1. LOOK AT THE REQUIREMENTS:** To achieve a WACE and ensure your subject selection meets them. An outline of these requirements can be found in the next section of this Course Guide.
- **2. CONSIDER YOUR INTERESTS:** Choose courses that you are passionate about and will be motivated to study for the next two years.
- **3. CONSIDER YOUR FUTURE GOALS:** Spend some time looking at which pathway you would like to take after graduating from Ellenbrook Christian College, whether this will be tertiary education, training, or employment. As you do this, think about your career aspirations, which will guide your subject selection process.
- **4. CONSIDER YOUR ABILITIES:** When choosing the type or level of course, ensure you challenge yourself while setting realistic goals. Consider your current achievements in particular subject areas as this will indicate your potential to achieve in Year 11 and 12 courses.
- **5. ENSURE THAT YOU MEET THE REQUIREMENTS**: Ensure you meet the requirements for entry into a university or TAFE, as entry into their courses is often very competitive. They each have very specific and differing requirements. Also, find out about any course-specific prerequisites.
- **6. ASK:** If you need advice, don't be afraid to ask teachers or contact the university or TAFE to find out more detail on course entry requirements.



Students with Learning Support Requirements

Appropriate opportunities will be provided for students with learning support requirements to allow them to demonstrate their achievement of course objectives. It is vital that the College is made aware of any learning support requirements that students have so that we can ensure that each student is able to reach their academic potential.

Special consideration will be given to students who have a long-term illness or prolonged absences due to illness or disability. According to each circumstance, special arrangements regarding assessments can be made with subject teachers initially with further consultation with the Head of Practice and Pedagogy.

In ATAR courses (when it is appropriate), extra time or the use of other adaptations during internal assessments may be granted to students who have diagnosed medical or learning support requirements. Testing must indicate that they fit the SCSA criteria for special consideration in external exams. Further advice can be sought from our Head of Learning Support.



WACE Requirements

(Western Australian Certificate of Education)

TO ACHIEVE A WACE YOU WILL BE REQUIRED TO MEET:

A) Literacy and Numeracy Requirements

• Demonstrate a minimum standard of literacy and a minimum standard of numeracy (demonstrated through achieving a 'Strong Proficiency Level' in NAPLAN in Year 9 or successful completion of OLNA).

B) Breadth and Depth Requirements

- Complete a minimum of 20 units (ATAR and/or General Courses) or equivalent during Year 11 and Year 12, as described below (each unit is a semester's work).
- A minimum of 10, Year 12 units or the equivalent.
- Two completed Year 11 English units and one pair of completed Year 12 English units (one year-long course).
- One pair of Year 12-course units from each of List A (arts/languages/social sciences) and List B (mathematics/science/technology).

C) Achievement Standard Requirements

• Students will be required to achieve 14 'C' grades or better (or equivalent, see below) in Year 11 and Year 12 units, including at least six 'C' grades or better in Year 12 units (or equivalent).

D) Complete Required Courses

• Complete four or more Year 12 ATAR courses, or five or more year 12 General courses, or complete a single Certificate II or higher in VET in combination with ATAR, General or Foundation courses.

Achieving a WACE through VET and Endorsed Programs

Unit equivalence can be obtained through VET programs and/or endorsed programs. The maximum unit equivalence available through these programs is eight units – four Year 11 and four Year 12 units.

Students can earn unit equivalence in the following ways:

- Up to eight-unit equivalents by completing VET programs.
- Up to four-unit equivalents by completing endorsed programs.
- Up to eight-unit equivalents through a combination of VET and endorsed programs, with a maximum of fourunit equivalents from endorsed programs.

The amount of unit equivalence allocated to VET and endorsed programs is as follows:

- Certificate II: 4 units (2 in Year 11 and 2 in Year 12)
- Certificate III / Higher: 6 units (2 in Year 11 and 4 in Year 12) for full completion.
- Endorsed programs unit equivalence is identified on the SCSA's approved list of endorsed programs.

Types of Courses

THERE ARE THREE TYPES OF COURSES OFFERED AT ELLENBROOK CHRISTIAN COLLEGE:

- 1. **ATAR course units:** for students who are aiming to enrol in a university course directly from school. These courses will be examined by the Authority and contribute to the achievement of an Australian Tertiary Admission Rank (ATAR). Most ATAR courses will require a minimum of three hours of home study each week. *ATAR is difficult, but not impossible.*
- 2. **General course units:** for students who are aiming to enter further training or the workforce directly from school. These courses will not be examined by the Authority. However, they do require completion of an Externally Set Task (EST), set by the authority and completed by all students studying that course in the state during Year 12.
- 3. **Vocational Education and Training (VET) courses:** for students participating in nationally recognised training, to meet standards as set by the Australian Skills Quality Authority, through a Registered Training Organisation. We offer some courses through a partnership with IVET and allow students to attend external TAFE Colleges.



ATAR Requirements

Based on our experience, we have identified that students who are able to achieve a 'B' grade in Year 10 courses normally achieve good results in ATAR subjects. Students who do not meet this requirement generally struggle to find success. It is better for a student to achieve a strong WACE than a poor ATAR score.

If a student doesn't meet the 'B' grade requirement for an ATAR subject, there is still an opportunity to apply for that ATAR course. This will involve a meeting with the Head of Practice and Pedagogy and the Head of Secondary.

We encourage students to commit to good outcomes, rather than having to withdraw from courses due to low grades and unrealistic expectations. Students experience better outcomes when they are aware of success or liability in a subject early. Early awareness helps students make the right decision on what pathway to take moving forward. Parents, students, and College staff can discuss each student's unique situation during our Term 2 individual Pathway Meetings.

A student's ATAR is derived from the TEA, which is the sum of the best 4 final scores in ATAR courses. The final score in an ATAR course is a 50:50 combination of the Year 12 school mark and the ATAR exam. To arrive at the final combined mark for a course, several statistical processes (moderation, standardisation, scaling) are applied.

To read more about how your ATAR and TEA will be calculated visit: www.tisc.edu.au/static-fixed/statistics/misc/marks-adjustment-process.pdf

More information about the ATAR is available at: www.tisc.edu.au/static/guide/atar-about.tisc

Students must be enrolled in at least four ATAR courses to be eligible to receive an ATAR. The rank is used by universities as a selection mechanism and directly reports a student's position relative to other students. It allows students to be accurately compared year by year and also allows WA students to be directly compared with the results of students in other states.

What Is Your Pathway?

University

Students who choose the university pathway typically study ATAR courses over their senior secondary years with a minimum of five ATAR courses in Year 12.

Requirements for Tertiary Entrance are:

- An Australian Tertiary Admission Rank (ATAR) that is sufficiently high to gain a place in a particular institution, faculty, or course. The rank required varies from year to year and depends on places available in the selected course at a university and the standard of the applicants.
- Competence in English as designated by the university concerned a scaled mark of at least 50 in ATAR English, English Literature, or English as an Additional Language. Students not achieving the standard can sit the STAT to demonstrate their English competency.
- The Western Australian Certificate of Education.
- The prerequisites designated for a particular university course (which will be outlined on the TISC website)
 expected to be a scaled mark of at least 50 in the specified ATAR course.

For more detailed information about university admissions please visit TISC online: www.tisc.edu.au

Visit the University Websites to See Tertiary Course Prerequisites
Curtin University of Technology
Edith Cowan University
<u>Murdoch University</u>
Sheridan College
University of Notre Dame Australia
<u>University of Western Australia</u>

What Is Your Pathway?

Registered Training Organisations

Students who wish to study at a Registered Training Organisation (RTO), for example TAFE, or enter the workforce after graduating usually study VET and General courses in Years 11 and 12.

The General & Vocational Pathway consists of three options; all must include an English course.

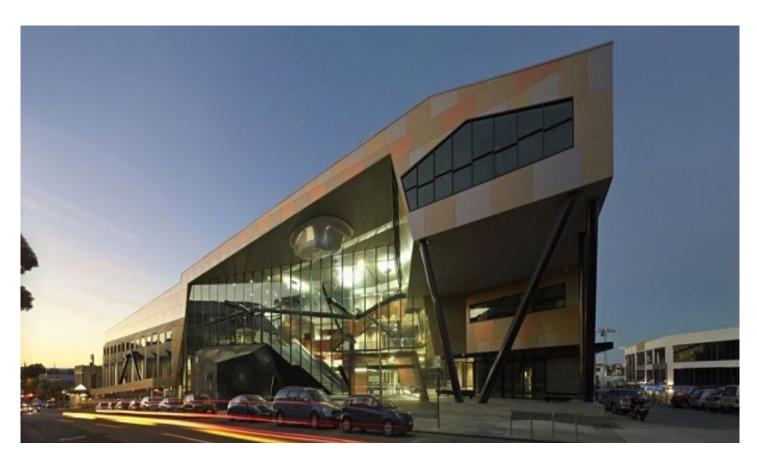
- 1. Six General courses.
- 2. Five General courses and one VET course.
- 3. Four General courses and two VET courses.

General courses are not externally examined but have Externally Set Tasks (EST) in Year 12, which is set by SCSA and contributes towards the final grade.

Requirements for RTO entrance after graduation:

- Demonstrate minimum literacy and numeracy skills through OLNA or NAPLAN.
- Course specific entry requirements, such as higher level of Mathematics, or a written response
 to selection criteria.

Please check your preferred RTO for course specific entrance requirements.



Alternative Entry Pathways

There are several ways to gain entry into a university without an ATAR score. If you would like to consider these options, be sure to access the information on the university websites. This information was correct at the time of publication but is subject to change.

Alternative Entry Pathways

Edith Cowan University

- Experience-based entry to gain direct entry to a university course.
- Completed WACE
- Meet the English Competency requirements
- Satisfy any prerequisites for the course you want to apply for.
- www.ecu.edu.au/future-students/course-entry/experience-based-entry-scheme

Murdoch University

- CERT IV: Students can apply if they have recently completed a TAFE Cert IV or higher and meet the English Language requirements.
- EXPERIENCE or PORTFOLIO: Entry for many arts/media/communications courses.
- ENABLING COURSES:
 - On Track Sprint a free-4 week course for students with an ATAR between 60.00 and 69.95.
 - On Track a free 14-week program that enables students who don't qualify for entry through other pathways to gain entry to Murdoch.
- www.murdoch.edu.au/study/pathways-to-uni

The University of Notre Dame Australia

- CERT IV: Students can apply if they have recently completed a TAFE Cert IV or higher and meet the English Language requirements.
- Tertiary Enabling Program- students who did not meet current administration criteria are selected to do a one- semester preparation program.
- www.notredame.edu.au/study/applications-and-admissions/pathways
- www.notredame.edu.au/study/applications-and-admissions/pathways/other-entry-pathways

Curtin University

- CERT IV: Students can apply if they have recently completed a TAFE Cert IV or higher and meet the English Language requirements.
- PORTFOLIO: Entry is available for selected courses.
- UniReady Enabling one semester program; study mode is on-campus, online or a combination of both.
- <u>www.curtin.edu.au/study/applying/pathways</u>

The University of Western Australia

• Broadway - eligible students from identified schools receive an automatic ATAR 'boost', for example, students with an ATAR between 75 and 79.95 recieve an adjusted selection rank of 80 to meet minimum entry requirements.



English ATAR

Course Description

The English ATAR course focuses on developing students' analytical, creative, and critical thinking and communication skills in all language modes, encouraging students to critically engage with texts from their contemporary world, the past, and from Australian and other cultures. Through close study and wide reading, viewing and listening, students develop the ability to analyse and evaluate the purpose, stylistic qualities and conventions of texts and to enjoy creating imaginative, interpretive, persuasive and analytical responses in a range of written, oral, multimodal and digital forms. Students develop their oral and written communication skills and learn critical analysis - all skills that are helpful for careers in areas such as education, journalism, media, business, law and diplomacy, politics, travel and tourism.

Year 11 Pre-requisites: B Grade in Year 10 English

Year 11: Units 1 & 2

Unit 1: Language, text, purpose, context

Students explore how meaning is communicated through the relationships between language, text, purpose, context and audience. Through responding to and creating texts, students consider how language, structure and conventions operate in a variety of imaginative, interpretive and persuasive texts. Study in this unit focuses on the similarities and differences between texts and how visual, spoken and written elements combine to create meaning.

Unit 2: Language and structural choices

Students analyse ideas, attitudes and voices in texts to consider how texts represent the world and human experience. They study the interplay of imaginative, interpretive, persuasive and analytical elements in texts and present their own analyses. They critically examine the effect of stylistic choices and how they position audiences for particular purposes, revealing and/or shaping attitudes, values and perspectives. Students are encouraged to reflect on their language choices and consider why they have represented ideas in particular ways in their own texts.

Year 12: Units 3 & 4

Unit 3: Language, text, purpose, context

Students explore representations of themes, issues, ideas and concepts in diverse texts. They analyse and compare the relationships between language, genre and contexts, comparing texts within and/or across different genres and modes. Students recognise and analyse the conventions of genre in texts and consider how those conventions may assist interpretation. Students compare and evaluate the effect of different media, forms and modes on the structure of texts and how audiences respond to them.

Unit 4: Interpretations and perspectives

Students examine different interpretations and perspectives to extend their knowledge of purpose and style. They challenge perspectives, values and attitudes in texts, developing and testing their own interpretations through debate and argument. Students explore relationships between content and structure, voice and perspectives, and the text and context. Students demonstrate understanding of the texts studied through creation of imaginative, interpretive, persuasive and analytical responses.

English GENERAL

Course Description

The English General course focuses on consolidating and refining the skills and knowledge needed by students to become competent, confident and engaged users of English in everyday, community, social, further education, training and workplace contexts. The course is designed to provide students with the skills to succeed in a wide range of post-secondary pathways by developing their language, literacy and literary skills. Students comprehend, analyse, interpret, evaluate and create analytical, imaginative, interpretive and persuasive texts in a range of written, oral, multimodal and digital forms.

Year 11: Units 1 & 2

Unit 1: Comprehending and responding

Students employ strategies to assist comprehension, and read, view and listen to texts to connect, interpret and visualise ideas. They learn how to respond personally and logically to texts by questioning, using inferential reasoning and determining the importance of content and structure. Students consider how organisational features of texts help the audience to understand the text and communicate ideas and information clearly and correctly in a range of contexts. They apply their understanding of language through the creation of texts for different purposes.

Year 12: Units 3 & 4

Unit 3: Exploring different perspectives

Students explore attitudes, text structures and language features to understand a text's meaning and purpose. They examine relationships between context, purpose and audience in different language modes and texts. Students consider how perspectives and values are presented in texts to influence audiences and develop their own interpretations when responding to texts. They learn how to communicate logically, persuasively and imaginatively in different contexts, using a variety of types of texts.

Unit 2: Interpreting ideas and arguements

Students analyse text structures and language features and identify the ideas, arguments and values expressed. They consider the purposes and possible audiences of texts and examine the connections between purpose, structure and context. Students integrate relevant information and ideas from texts to develop their own interpretations. They create texts using persuasive, visual and literary techniques to engage audiences in a range of modes and media.

Unit 4: Community, local and global issues

Students explore how ideas, attitudes and values are presented by synthesising information from sources to develop independent perspectives. They analyse how authors influence and position audiences and develop reasoned responses to these in text forms for a variety of audiences. Students construct and clearly express coherent, logical and sustained arguments. They consider purpose and audience response when creating their own persuasive, analytical, imaginative, and interpretive texts.

Humanities and Social Sciences in Action GENERAL

Course Description

The Humanities and Social Sciences in Action General course encourages students to become socially aware and active participants in society. They develop knowledge and understanding of contemporary and ongoing issues facing individuals, societies and governments today and into the future. The course provides students with the skills to make informed choices about important social issues. Students explore how change can be affected by the actions and perspectives of stakeholders, from individuals and groups to governments. Humanities and Social Sciences skills are used to research viewpoints around contemporary issues and develop possible solutions to help ensure a more sustainable future.

Year 11: Units 1 & 2

Unit 1: All humans have rights

In this unit students focus on human rights and how these rights have been gained over time. Students explore the United Nations Universal Declaration of Human Rights, and how people across the world have been able to access these rights through laws, both statute and common, policy changes and the progression of attitudes, perspectives, and behaviours over time. Students investigate case studies to see the development of civil and human rights movements and the impact these still have today. They examine the circumstances that have prevented minority groups from accessing basic human rights and suggest ways to improve access to rights for these groups.

Unit 2: A sense of community

In this unit students focus on opportunities as well as challenges within their local communities. Students investigate the meaning of, and their place within, a community. They explore issues and possible solutions relevant to communities that they are or may be involved in. Through the development of Humanities and Social Sciences skills, students investigate how to improve living within these communities. They are able to propose changes and solutions to issues facing a community and explore ways of raising awareness for this. Students investigate their place within a community and how they as individuals can affect change on a variety of scales.

Year 12: Units 3 & 4

Unit 3: People, planet and properity

In this unit, students explore the impact of human interaction with the environment when allocating resources and find ways to live more sustainably. Students investigate how humans use resources to ensure the needs and wants of the world's population are being met and explore the impact this resource consumption has on the planet. They explore ways that individuals and organisations are reducing this impact and how they themselves can further contribute to these actions. Students also investigate the decisions stakeholders make around the use of resources, including prosperity and planet versus profit.

Unit 4: Disruptions

In this unit students investigate how disruptions (economic, environmental, political, social, demographic and technological), and the response to those disruptions, can change the way people and the world operate. From disruptions come the opportunity to innovate. Students investigate how disruptive innovations have the potential to be a positive force in the world and explore the role of innovators in providing solutions that add value to society. They explore the use of innovative methods to invoke action that promotes societal benefits. Students also reflect on their role in effecting change in society.

Modern History ATAR

Course Description

This course enables students to study the forces that have shaped today's world and provides them with a broader and deeper comprehension of the world in which they live. While the focus is on the 20th century, the course refers back to formative changes from the late 18th century onwards and encourages students to make connections with the changing world of the 21st century. Modern History enhances students' curiosity and imagination and their appreciation of larger themes, individuals, movements, events and ideas that have shaped the contemporary world. The themes that run through the units include: local, national and global conflicts and their resolution, the rise of nationalism and its consequences, the decline of imperialism and the process of decolonisation, the continuing struggle for the recognition of human rights, the transformation of social and economic life, the regional shifts in power and the rise of Asia, and the changing nature and influence of ideologies.

Year 11 Pre-requisites: B Grade in Year 10 HASS and Year 10 English

Y	ear	11:	Units	18	2

Unit 1: Understanding the modern world

In this unit, students are introduced to significant developments in the modern period that have defined the modern world, and the ideas that underpinned them, such as liberty, equality and fraternity.

Unit 2: Movements for change in the 20th century

In this unit, students examine significant movements developed in response to the ideas studied in Unit 1 that brought about change in the modern world and that have been subject to political debate. It focuses on the ways in which individuals, groups and institutions challenge authority and transform society.

Year 12: Units 3 & 4

Unit 3: Modern nations in the 20th century

In this unit, students examine the 'nation' as the principal form of political organisation in the modern world; the crises that confronted nations in the 20th century; their responses to these crises, and the different paths they have taken to fulfil their goals.

Unit 4: The modern world since 1945

In this unit, students focus on the distinctive features of the modern world that emerged in the period 1945–2001. It aims to build their understanding of the contemporary world; that is, why we are here at this point in time.

Politics and Law ATAR

Course Description

Politics and Law is a critical study of the processes of decision making concerning society's collective future. The study of politics examines the structures and processes through which individuals and groups with different interests, beliefs and goals, deliberate and negotiate in order to make choices, respond to changing circumstances and enact laws. The study of law examines the system of laws governing the conduct of the people of a community, society or nation, in response to the need for regularity, consistency and justice based upon collective human experience. The Politics and Law ATAR course aims to develop knowledge and understanding of the principles, structures, institutions, processes, and practices of political and legal systems, primarily in Australia and where appropriate, other systems and/or countries. The course challenges students to critically examine the effectiveness of political and legal systems using criteria, such as openness, responsiveness and accountability of those systems. The course provides for both a chronological and contemporary understanding of political and legal issues in society

Year 11 Pre-requisites: B Grade in Year 10 HASS and Year 10 English

Year 11: Units 1 & 2

Unit 1: Popular culture

Democracy and the rule of law Students examine the principles of a liberal democracy; the legislative, executive and judicial structures and processes of Australia's political and legal system; the functioning of a non-democratic system; and the processes of a noncommon law system. Political and legal developments and contemporary issues provide a framework for the unit.

Unit 3: Political and legal power

Year 12: Units 3 & 4

This unit examines aspects of the political and legal system established by the Commonwealth Constitution, including the roles of the legislative, executive and judicial branches of government, comparing non Westminster system, the influence of individuals, political parties and pressure groups on the law making process of parliament and the courts, and the operation of federalism and the balance of power between the Commonwealth and the States in Australia.

Unit 2: Representation and justice

This unit examines the principles of fair elections; the electoral and voting systems in Australia since Federation, making reference to a recent (the last ten years) election in Australia; the electoral system of another country; an analysis of the civil and criminal law processes in Western Australia; and an analysis of a non-common law system. Political and legal developments and contemporary issues (the last three years) are used to provide a framework for the unit.

Unit 4: Accountability and rights

Students examine the structures, processes and procedures of accountability in relation to the legislative, executive and judicial branches of government in Australia, how rights are protected, and democratic principles can be upheld and/or undermined, in Australia and one other country, and the experience of a particular group with respect to their political and legal rights in Australia.

Media Production & Analysis (Film) GENERAL

Course Description

The Media Production and Analysis General course aims to prepare students for a future in a digital and interconnected world by providing the skills, knowledge and understandings to tell their own stories and interpret the stories of others. Students are encouraged to explore, experiment and interpret their world, reflecting and analysing contemporary life, while understanding that this is done under social, cultural and institutional constraints. Students, as users and creators of media products, consider the important role of audiences and their context. This course focuses on the development of technical skills in the practical process.

Year 11: Units 1 & 2

Unit 1: Mass media

This unit focuses on the mass media, encouraging students to reflect on their own media use, analyze common representations, and understand the construction and production of media. Students learn media languages, examining how codes and conventions create narratives and how audiences interpret these representations. They engage with everyday media, developing basic production skills and applying their creativity with teacher assistance.

Unit 2: Point of view

This unit focuses on the concept of point of view in media, teaching students how it is constructed and analysed in various media genres and styles. Students explore how information and specific techniques are used to present particular viewpoints and engage with both commercial and non-commercial media. They learn about production processes, decision-making controls, and develop strategies and skills for creating their own media work.

Year 12: Units 3 & 4

Unit 3: Entertainment

This unit focuses on entertainment, building on students' existing knowledge and expanding their understanding of media languages and the use of codes and conventions. Students explore how media representations and values are constructed, considering audience experiences and the impact of production contexts. They engage with relevant media, developing ideas and learning production skills to apply their knowledge and creativity in their own media projects.

Unit 4: Representation and reality

This unit focuses on representation and reality, examining how media constructs identities, places, or ideas based on shared values. Students explore various media genres and styles, learning how codes, conventions, and techniques dramatise and re-present reality to engage and inform audi- ences. They analyse and interact with diverse media works, understanding production controls and responsibilities, while developing their own strategies and production skills.

Media Production & Analysis (Film) ATAR

Course Description

The Media Production and Analysis (Film) ATAR course aims to prepare students for a future in a digital and interconnected world by providing the skills, knowledge, and understanding to tell their own stories and interpret the stories of others. Students are encouraged to explore, experiment, and interpret their world, reflecting and analysing contemporary life while understanding that this is done under social, cultural, and institutional constraints. As users and creators of media products, students consider the important role of audiences and their context. This course focuses on the application of media theory in the practical process.

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Unit 1: Popular culture

The focus of this unit is popular culture. Students analyse and respond to a range of popular culture media, identifying techniques, purposes and meanings that are created and audience interpretation. Students develop their own ideas and learn production skills to produce media work in the context of popular culture.

Unit 2: Influence

The focus of this unit is the influence of media. Students analyse and respond to a range of media work designed to influence audiences. Students develop their own ideas and expand production skills to produce media work in the context of media influence.

Year 12: Units 3 & 4

Unit 3: Media art

The focus of this unit is media art. Students analyse and respond to contemporary and traditional examples of media art. They identify techniques and meanings that are created and consider audience interpretation and perception of media art. Students extend and refine their own ideas and production skills to produce media work.

Unit 4: Power and persuasion

The focus of this unit is power and persuasion. Students examine the way that persuasive media and producers reflect, challenge and shape audience values and attitudes. Students extend and refine their own ideas and production skills to produce media work.

Drama GENERAL

Course Description

The Drama General course focuses on drama in practice and aesthetic understanding as students integrate their knowledge and skills. They engage in drama processes such as improvisation, play building, text interpretation, playwriting and dramaturgy. This allows them to create original drama and interpret a range of texts written or devised by others by adapting the theoretical approaches of drama practitioners like Stanislavski and Brecht. Students' work in this course includes production and design aspects involving directing, scenography, costumes, props, promotional materials, and sound and lighting. Increasingly, students use new technologies, such as digital sound and multimedia. They present drama to make meaning for a range of audiences and adapt their drama to suit different performance settings. The focus in this course is primarily on ensemble performance and teamwork.

Year 11: Units 1 & 2

Unit 1: Dramatic Storytelling

Students engage with the skills, techniques, processes and conventions of dramatic storytelling. Students view, read and explore relevant drama works and texts using scripts and/or script excerpts from Australian and/or world sources.

Unit 2: Drama performance events

The focus for this unit is drama performance events for an audience other than their class members. In participating in a drama performance event, students work independently and in teams. They apply the creative process of devising and of interpreting Australian and/or world sources to produce drama that is collaborative and makes meaning.

Year 12: Units 3 & 4

Unit 3: Representational, realist drama

Students explore techniques of characterisation through different approaches to group based text interpretation, particularly those based on the work of Stanislavski and others. In this unit, students have the opportunity to research and collaboratively workshop, interpret, perform and produce texts in forms and styles related to representational, realistic drama that educate and present perspectives.

Unit 4: Presentational, non-realist drama

Students explore techniques of role and/or character through different approaches to group based text interpretation, particularly those based on the work of Brecht and others. In this unit, students have the opportunity to research and collaboratively workshop, interpret and perform drama texts related to presentational, non-realistic drama that challenge and question perspectives.

Drama ATAR

Course Description

The Drama ATAR course focuses on drama in practice as students integrate their knowledge and skills. They use the elements and conventions of drama to develop and present ideas and explore personal and cultural issues. They engage in drama processes, such as improvisation and text interpretation which allow them to create drama and interpret a range of texts written or devised by others. Their work in this course includes production and design aspects, such as sets, costumes, props, sound and lighting. Increasingly, students use technologies, such as digital sound and multimedia. They present drama to a range of audiences and work in different performance settings.

Year 11: Units 1 & 2

Unit 1

This unit focuses on realism and representational drama. In this unit, students have the opportunity to research and collaboratively workshop, interpret and perform drama texts in forms and styles related to realism and representational drama. Within the focus of realism and representational drama, students must investigate the approach of Konstantin Stanislavski.

Year 12: Units 3 & 4

Unit 3

This unit focuses on the realisation of drama text, context, forms and styles through the application of a selected approach.

Within the focus of Unit 3, students must investigate the approach of one of the following:

- Anne Bogart and Tina Landau
- Uta Hagen
- Robert Cohen
- David Mamet
- Maria Knebel and Sharon Marie Carnicke
- Rudolf Laban

Unit 2

This unit focuses on non-realism and presentational drama. In this unit, students have the opportunity to research and collaboratively workshop, interpret and perform drama texts related to non-realism and presentational drama. Within the focus of non-realism and presentational drama, students must investigate the approach of Bertolt Brecht.

Unit 4

This unit focuses the approach to and interpretation of drama texts, contexts, forms and styles.

Within the focus of Unit 4, students must investigate the approach of one of the following:

- Antonin Artaud
- Frantic Assembly
- Steven Berkoff
- Jacques Lecoq
- Jerzy Grotowski
- Complicité

Dance GENERAL

Course Description

The Dance General course acknowledges the interrelationship between practical and theoretical aspects of dance – the making and performing of movement and the appreciation of its meaning. Through decision-making in individual and group work, students use a wide range of creative processes, such as improvisation and the use of choreographic elements and devices to create dance works. They also learn how dance styles and forms are historically derived and culturally valued. Through dance, students experience an intrinsic sense of enjoyment and have an opportunity to achieve a high level of movement skills.

Year 11: Units 1 & 2

Unit 1: Exploring the components of dance

Within the broad focus of exploring dance components, teachers tailor learning to student interests and prior knowledge. Students investigate elements of dance and choreographic processes, completing structured tasks to create performance works. They engage in exploration, improvisation, research, reflection, and response, gaining hands-on experience in dance-making. Technologies and design concepts are introduced during the planning stages of choreography. A broad introduction to dance genres helps students understand dance within historical and cultural contexts, developing insight into its purpose and function. This approach fosters creativity, critical thinking, and contextual awareness in dance.

Year 12: Units 3 & 4

Unit 3: Popular culture

Within the broad focus of popular culture, teachers select learning contexts that relate to the interests of their students and build upon the understandings that they have already acquired. Through practical lessons, students use safe dance practices and improved physical competencies to acquire genre-specific technique. Performance qualities and etiquette are improved through increased opportunities for performance of popular styles. Students solve choreographic tasks to produce dance works incorporating dance elements, choreographic processes, technologies and design concepts that reflect current popular trends.

Unit 2: Dance as entertainment

Within the broad focus of dance as entertainment, teachers select learning contexts that relate to the interests of students and build upon the understandings that they have already acquired.

Students explore the entertainment potential of dance and choreography. In practical lessons, they improve safe dance practices and their physical competencies while acquiring genre-specific technique. They explore and experiment with the elements of dance and processes of choreography to solve choreographic tasks for performance. Students identify and select technologies and design concepts which enhance the entertainment value of the dance and place it in its social, historical and economic context.

Unit 4: Australian dance

Within the broad focus of Australian dance, teachers select learning contexts that relate to student interests and build on their existing understandings. Through practical lessons, students apply safe dance practices and improve physical competencies in genre-specific technique. Performance opportunities in formal settings help develop individual stage presence. Understanding the diverse functions and contexts of dance in Australia enables students to compare their own dance with that of others. They analyse personal cultural beliefs and values in relation to traditional and contemporary dance styles, deepening their understanding of their own dance heritage.



Course Description

The Dance ATAR course integrates practical and theoretical elements of dance, focusing on creating, performing, and interpreting movement. Students engage in individual and group work, using improvisation, choreographic elements, and personal expression to develop unique dance pieces. They explore the role of technology in enhancing dance and study the historical and cultural significance of styles and forms. By analysing existing works and refining their own, students reflect the choreographer's intent. The course fosters creativity, critical thinking, and technical skill, offering both enjoyment and the opportunity to achieve a high standard of performance.

Year 11: Units 1 & 2

Unit 1: Popular dance

In this unit, students will explore how popular dance reflects and influences cultural and social trends, identity and community. They will learn about the impact of media and technology on the evolution of popular dance, considering how platforms such as radio through to social media have transformed the visibility and accessibility of dance.

Year 12: Units 3 & 4

Unit 3: Australian dance

Within the broad focus of Australian dance, students explore the development of dance in Australia. Students explore the diverse realm of all Australian dance, from traditional to contemporary. Through their studies, students recognise how social, political and artistic factors shape the evolution of Australian dance, reflecting its dynamic nature. Exploring the work of Australian dance companies and dancers, this unit provides an insight into the vibrant industry that is dance in Australia, highlighting the profound impact of cultural diversity and creative innovation on the nation's artistic expression.

Unit 2: Youth dance

This unit focuses on creating dance that explores original concepts and expresses personal ideas. This course focuses on the development of technical skills, artistic expression and performance abilities in various dance styles popular among youth. Students explore learning contexts that reflect their own cultural understanding and produce unique work with a personal style.

Unit 4: Innovation in dance

Within the broad focus of innovation in dance, students explore the development of dance from throughout the world.

Students delve into the creative process of dancers who craft innovative performances by integrating their unique artistic understanding. They witness how these dancers draw inspiration from a spectrum of sources, embracing both local traditions and global dance innovations. Through this fusion of influences, dancers enrich their artistic expressions, creating dynamic and compelling works that resonate with audiences worldwide.

Visual Art GENERAL

Course Description

In the Visual Arts General course, students engage in traditional, modern and contemporary media and techniques within the broad areas of art forms. The course promotes innovative practice. Students are encouraged to explore and represent their ideas and gain an awareness of the role that artists and designers play in reflecting, challenging and shaping societal values. Students are encouraged to appreciate the work of other artists and engage in their own art practice.

Year 11: Units 1 & 2

Unit 1: Experiences

Students create artworks inspired by their personal experiences and observations, engaging in art activities to enhance their sense of observation. They learn to document their experiences through various art projects, fostering an understanding and appreciation of visual language in everyday life. Through experimentation and exploration, students develop skills in imaginative picture-making, focusing on their own lives and immediate environment with freedom for interpretation and material experimentation.

Year 12: Units 3 & 4

Unit 3: Inspirations

Students explore diverse sources for artistic inspiration, including personal experiences, beliefs, and imagination, with flexibility to choose learning contexts aligned with their interests. They deepen their understanding of visual language, applying it to both creating and interpreting artworks while honing skills in inquiry, observation, and media manipulation. Through research and hands-on experiences with artworks, students actively engage in perception, reflection, and response, considering the inspirations behind artists' works and presenting their own creations with opportunities for evaluation and exhibition.

Unit 2: Explorations

Students engage in idea generation and development through exploration of stimulus materials from their local environment, employing various techniques and processes in their artwork creation. They study the work of other artists to understand stylistic features across different time periods and locations, manipulating art elements and principles to produce original pieces. Additionally, students express personal beliefs and feelings through diverse media and materials, recording and reflecting on their artistic progress.

Unit 4: Investigations

Students delve into diverse artists, art forms, and techniques to spark and refine their creative ideas, focusing on both spontaneous and analytical drawing styles using various media. They deepen their grasp of visual language, applying it to both creating and interpreting art while exploring the expressive potential of different techniques and processes. Through investigation and reflection on artworks and media, students enhance their understanding of the creative process and hone their analytical and production skills to effectively communicate their own ideas.

Visual Art ATAR

Course Description

In the Visual Arts ATAR course, students engage in traditional, modern and contemporary media and techniques within the broad areas of art forms. The course promotes innovative practice. Students are encouraged to explore and represent their ideas and gain an awareness of the role that artists and designers play in reflecting, challenging and shaping societal values. The Visual Arts ATAR course allows students to develop aesthetic understandings and a critical awareness to appreciate and make informed evaluations of art through their engagement of their own art practice and the work of others.

Year 11: Units 1 & 2

Unit 1: Differences

This unit focuses on the theme of differences—cultural, historical, social, and artistic. Students explore how place, gender, class, and era influence art, and how artists use distinct media, styles, and mark-making to express personal vision. They develop skills in gathering and recording ideas and documenting their creative process. Students examine how visual language and media choices convey meaning and function. They explore diverse interpretations of artwork, considering the context in which it was created. Through studying various artists and periods, students gain an appreciation for individualistic styles and develop their own creative responses using a range of media and technologies.

Unit 2: Identities

This unit explores identities—personal, social, cultural, and gender. Students examine how self-expression shapes individuals and cultures, using varied stimuli and investigative approaches to create personal artworks. They develop ideas and concepts, making informed choices in materials and techniques. The unit explores art's role in expressing identity through storytelling, spiritual and psychological expression, ceremony, and ritual. Students consider how art reflects or questions cultural values and gives form to shared concerns. Engaging with artworks deepens insight, challenges assumptions, and builds understanding of visual heritage. They reflect on their beliefs, exploring how art can confirm or question social and personal identity.

Year 12: Units 3 & 4

Unit 3: Commentaries

This unit explores commentaries in art, focusing on its social and cultural purposes. Students create a cohesive body of work through innovative inquiry, documenting experiences within contemporary society. They transform ideas using diverse media and techniques, and critically examine artworks to explore meaning, purpose, and values. Students reflect on their beliefs and consider how art reflects and shapes societies across time. They explore the roles of artists—hero, outsider, critic—and the social functions of art, such as satire, political expression, and communication. The unit also investigates how form, function, and context influence meaning and how recontextualisation shapes interpretation.

Unit 4: Points of view

This unit focuses on points of view. Students explore personally significant ideas through sustained inquiry, developing a cohesive and authentic body of work. They investigate concepts using visual language and document the evolution of their thinking and creative processes. Combining skills, techniques, and innovation, students refine a personal style. They use critical analysis to understand art making and interpretation, exploring how factors like time, place, culture, religion, and politics shape viewpoints. Through analysis of their own and others' work, students examine the relationship between artwork, audience, and context, considering how these elements influence meaning and contribute to diverse perspectives.

Music GENERAL

Course Description

The Music General course encourages students to explore a range of musical experiences, developing skills, understanding, and creative potential through a selected context. It includes a written component—Aural and Theory, Composing and Arranging, Investigation and Analysis—and a practical component. Aural and Theory is generic and adaptable to any context.

The practical offers three options delivered independently: perform on an instrument or voice, submit a composition portfolio, or complete a production project. The course promotes creative expression, aesthetic appreciation, and respect for music across times, places, and cultures, while supporting pathways to further study and careers in the music industry.

Year 11: Units 1 & 2

Unit 1

In this unit, students develop their skills, knowledge and understanding to listen to, compose, perform and analyse music. They develop aural and music literacy skills and learn how the elements of music can be applied when performing, composing and responding to music. Students learn about how music is created and performed, analysing musical works and exploring how social, cultural and historical factors shape music in the specific context selected for study.

Students develop skills, confidence and stylistic awareness to engage in music making as performers and audience members both individually and collaboratively.

Year 12: Units 3 & 4

Unit 3

In this unit, students develop their skills, knowledge and understanding to listen to, compose, perform and analyse music. They develop aural and music literacy skills and learn how the elements of music can be applied when performing, composing and responding to music. Students learn about how music is created and performed, analysing musical works and exploring how social, cultural and historical factors shape music in the specific context selected for study.

Students develop skills, confidence and stylistic awareness to engage in music making as performers and audience members both individually and collaboratively.

Unit 2

In this unit, students develop their skills, knowledge and understanding to listen to, compose, perform and analyse music. They develop aural and music literacy skills and learn how the elements of music can be applied when performing, composing and responding to music. Students learn about how music is created and performed, analysing musical works and exploring how social, cultural and historical factors shape music in the specific context selected for study.

Students develop skills, confidence and stylistic awareness to engage in music making as performers and audience members both individually and collaboratively.

Unit 4

This unit focuses on points of view. Students explore personally significant ideas through sustained inquiry, developing a cohesive and authentic body of work. They investigate concepts using visual language and document the evolution of their thinking and creative processes. Combining skills, techniques, and innovation, students refine a personal style. They use critical analysis to understand art making and interpretation, exploring how factors like time, place, culture, religion, and politics shape viewpoints. Through analysis of their own and others' work, students examine the relationship between artwork, audience, and context, considering how these elements influence meaning and contribute to diverse perspectives.

Food Science & Technology GENERAL

Course Description

The Food Science and Technology General course allows students to explore food-related interests while understanding its impact on health and wellbeing. They manage production processes, ensuring food safety and quality. Practical applications include investigating the food supply chain, value-adding techniques, and dietary planning for demographic needs. Students implement occupational safety and food handling practices, adapting recipes and processing techniques. This course enhances career opportunities in nutrition, health, food manufacturing, hospitality, and retail, equipping students with essential industry skills and knowledge.

Year 11: Units 1 & 2

Unit 1: Food choices and health

This unit examines the sensory and physical properties of food, influencing consumption of raw and processed items. Students explore balanced diets, nutrient functions, and nutrition principles that support healthy eating. They investigate health and environmental concerns arising from lifestyle choices and factors affecting local food purchases. Through hands-on activities, they devise food products, adapt recipes, and prepare nutritious meals. Emphasising safe food handling, students practice miseen-place, precision cutting, and processing techniques, utilising proper equipment and teamwork to develop innovative food products and systems.

Unit 2: Food for communities

This unit examines staple food supply and factors shaping adolescent food choices, including ethical considerations and processing systems. Students explore food sources, macronutrients, and water's role in health, addressing conditions like coeliac and lactose intolerance requiring specialised diets. They assess labelling and packaging regulations that ensure food safety and quality. Through practical application, students adapt recipes, develop food products, and apply technology processes to meet dietary needs. They evaluate products while demonstrating workplace safety, processing techniques, and effective food handling practices.

Year 12: Units 3 & 4

Unit 3: Food Science

This unit examines societal, lifestyle, and economic influences on food choices. Students explore the health effects of nutrient over- and under-consumption, investigating diet-related conditions impacting individuals and families. Using scientific methods, they analyse food functionality for effective preparation and processing. They apply technology and communication skills to design food systems, selecting resources to meet performance standards. Emphasising safety, students follow occupational health guidelines, implement safe food handling practices, and utilise diverse techniques to produce high-quality, nutritious food products.

Unit 4: The undercover story

This unit examines food spoilage, contamination, and preservation methods. Students explore food processing techniques, regulatory requirements for packaging and labelling, and the HACCP system for food safety. They investigate the food supply chain, value-adding processes, and factors influencing food choices, including economic and environmental impacts. Through dietary planning, students adapt recipes and techniques to meet nutritional needs. Applying technology, they develop preserved food products, justify resources used, assess sensory properties, and demonstrate the integration of preserved ingredients in other culinary applications.

Mathematics Specialist ATAR

Course Description

This course provides opportunities, beyond those presented in the Mathematics Methods ATAR course, to develop rigorous mathematical arguments and proofs, and to use mathematical models more extensively. Mathematics Specialist contains topics in functions and calculus that build on and deepen the ideas presented in the Mathematics Methods course, as well as demonstrate their application in many areas. The Mathematics Specialist course also extends understanding and knowledge of statistics and introduces the topics of vectors, complex numbers and matrices. Mathematics Specialist is the only ATAR mathematics course that should not be taken as a stand-alone course and it needs to be studied in conjunction with the Mathematics Methods ATAR course as preparation for entry to specialised university courses such as engineering, physical sciences and mathematics.

Year 11 Pre-requisites: B Grade in Year 10A Mathematics (Minimum of 75% in Year 10 Examinations)

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Unit 1

This unit covers three topics: Geometry, Combinatorics, and Vectors in the plane, which complement the Mathematical Methods ATAR course.

The Reasoning proficiency strand from Year 7–10 is continued in Geometry through developing mathematical arguments, illustrated via deductive Euclidean geometry. This topic also extends students' knowledge of Euclidean Geometry and supports later topics such as vectors and complex numbers. Combinatorics introduces techniques valuable in probability and algebra, while all topics enhance students' ability to construct mathematical arguments. Vectors in the plane offer new ways to work with two-dimensional space and prepare students for three-dimensional techniques in Unit 3. Together, these topics broaden mathematical experience, increase flexibility, and reveal the course's breadth and utility.

Year 12: Units 3 & 4

Unit 3

This unit includes three topics: Complex Numbers, Functions and Sketching Graphs, and Vectors in Three Dimensions.

Building on Unit 1's focus on two-dimensional vectors, this unit studies three-dimensional vectors, vector equations, and vector calculus, extending calculus knowledge from Mathematical Methods. Cartesian and vector equations, along with equations of planes, enable solving geometric and motion problems in 3D space. Complex numbers, introduced in Cartesian form in Unit 2, are now extended to polar form. The study of functions and graph sketching from Mathematical Methods is further developed for graph sketching and solving integration problems.

Unit 2

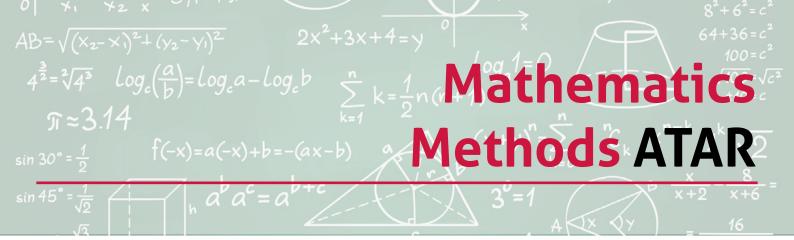
This unit includes three topics: Trigonometry, Matrices, and Real and Complex Numbers.

Trigonometry covers techniques used in this unit and Unit 3. Real and Complex Numbers continue students' study of numbers, with complex numbers further explored in Unit 3, and includes proof by mathematical induction. Matrices are studied, including their applications to linear transformations of the plane.

Unit 4

This unit covers three topics: Integration and Applications of Integration, Rates of Change and Differential Equations, and Statistical Inference.

This unit continues the study of differentiation and integration, applying calculus techniques to simple differential equations, particularly in biology and kinematics, demonstrating real-world applications. It also consolidates students' prior experience with probability and statistics through the study of statistical inference, focusing on the distribution of sample means and confidence intervals.



Course Description

This course focuses on the use of calculus and statistical analysis. The study of calculus provides a basis for understanding rates of change in the physical world, and includes the use of functions, their derivatives and integrals, in modelling physical processes. The study of statistics develops students' ability to describe and analyse phenomena that involve uncertainty and variation.

Mathematics Methods provides a foundation for further studies in disciplines in which mathematics and statistics have important roles. It is also advantageous for further studies in the health and social sciences.

In summary, this course is designed for students whose future pathways may involve mathematics and statistics and their applications in a range of disciplines at the tertiary level.

Year 11 Pre-requisites: B Grade in Year 10A Mathematics (Minimum of 65% in Year 10 Examinations)

Year 11: Units 1 & 2

Unit 1

The study of inferential statistics begins in this unit with a review of the fundamentals of probability and the introduction of the concepts of counting, conditional probability and independence. The unit covers a review of the basic algebraic concepts and techniques required for a successful introduction to the study of calculus. The basic trigonometric functions are then introduced. Simple relationships between variable quantities are reviewed, and these are used to introduce the key concepts of a function and its graph.

Year 12: Units 3 & 4

Unit 3

The study of calculus continues with the derivatives of exponential and trigonometric functions and their applications, together with some differentiation techniques and applications to optimisation problems and graph sketching.

It concludes with integration, both as a process that reverses differentiation and as a way of calculating areas. The fundamental theorem of calculus as a link between differentiation and integration is emphasised. In statistics, discrete random variables are introduced, together with their uses in modelling random processes involving chance and variation. This supports the development of a framework for statistical inference.

Unit 2

The algebra section of this unit focuses on exponentials. Their graphs are examined and their applications in a wide range of settings are explored. Arithmetic and geometric sequences are introduced, and their applications are studied. Rates and average rates of change are introduced, and this is followed by the key concept of the derivative as an 'instantaneous rate of change'.

These concepts are reinforced numerically, by calculating difference quotients both geometrically as slopes of chords and tangents, and algebraically. Calculus is developed to study the derivatives of polynomial functions, with simple application of the derivative to curve sketching, the calculation of slopes and equations of tangents, the determination of instantaneous velocities and the solution of optimisation problems. The unit concludes with a brief consideration of anti-differentiation.

Unit 4

The calculus in this unit deals with derivatives of logarithmic functions. In probability and statistics, continuous random variables and their applications are introduced, and the normal distribution is used in a variety of contexts. The study of statistical inference in this unit is the culmination of earlier work on probability and random variables.

Statistical inference is one of the most important parts of statistics, in which the goal is to estimate an unknown parameter associated with a population using a sample of data drawn from that population. In the Mathematics Methods ATAR course, statistical inference is restricted to estimating proportions in two-outcome populations.

Mathematics Applications ATAR

Course Description

This course focuses on the use of mathematics to solve problems in contexts that involve financial modelling, geometric and trigonometric analysis, graphical and network analysis, and growth and decay in sequences. It also provides opportunities for students to develop systematic strategies based on the statistical investigation process for answering statistical questions that involve analysing univariate and bivariate data, including time series data.

The Mathematics Applications ATAR course is designed for students who want to extend their mathematical skills beyond Year 10 level, but whose future studies or employment pathways do not require knowledge of calculus. The course is designed for students who have a wide range of educational and employment aspirations, including continuing their studies at university or TAFE.

Year 11 Pre-requisites:

- C grade in Year 10A Mathematics (Minimum of 50% in Year 10 Examinations) or
- B grade in Year 10 Standard Mathematics (Minimum of 65% in Year 10 Examinations)

Year 11: Units 1 & 2

Unit 1

This unit includes three topics: Consumer Arithmetic, Algebra and Matrices, and Shape and Measurement.

Consumer Arithmetic reviews rate and percentage change in money management, providing opportunities to use spreadsheets.

Algebra and Matrices continues Year 7–10 algebra studies and introduces matrices, focusing on symbolic representation and manipulation of real-life information.

Shape and Measurement builds on prior knowledge with similarity concepts and calculations involving simple geometric shapes, emphasizing practical applications including three-dimensional contexts.

Year 12: Units 3 & 4

Unit 3

This unit has three topics: Bivariate Data Analysis, Growth and Decay in Sequences, and Graphs and Networks.

Bivariate Data Analysis introduces methods for identifying and analysing associations between variable pairs, including the least-squares method, taught within the statistical investigation process.

Growth and Decay in Sequences uses recursion to model patterns of growth and decay in discrete situations, with applications such as compound interest, bacterial growth, and depreciation. Sequences also underpin the growth and decay patterns studied in Unit 4.

Graphs and Networks introduces the language of graphs and their use in modelling and analysing real-world situations like rail or social networks.

Unit 2

This unit has three topics: Univariate Data Analysis and the Statistical Process, Linear Equations and their Graphs, and Applications of Trigonometry.

Univariate Data Analysis develops skills to organise and summarise data within statistical investigations.

Linear Equations and their Graphs uses linear, piecewise, and step graphs to model and analyse practical situations.

Applications of Trigonometry extends knowledge to solve problems involving non-right-angled triangles in two and three dimensions, including angles of elevation and depression and bearings in navigation.

Unit 4

This unit has three topics: Time Series Analysis, Loans, Investments and Annuities, and Networks and Decision Mathematics.

Time Series Analysis builds on statistical study by introducing concepts and techniques within the statistical investigation process.

Loans, Investments and Annuities provide knowledge of financial mathematics to solve practical problems related to mortgages and investments.

Networks and Decision Mathematics uses networks to model and support decision-making in practical situations.

Mathematics Essential GENERAL

Course Description

The Mathematics Essential General course focuses on using mathematics effectively, efficiently and critically to make informed decisions. It provides students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning and community settings. This course provides the opportunity for students to prepare for post-school options of employment and further training.

Year 11: Units 1 & 2

Unit 1

This unit provides students with the mathematical skills and understanding to solve problems relating to calculations, applications of measurement, the use of formulas to find an unknown quantity and the interpretation of graphs. Throughout this unit, students use the mathematical thinking process. This process should be explicitly taught in conjunction with the unit content. Teachers are advised to apply the content of the four topics in this unit: Basic calculations, percentages and rates; Algebra; Measurement; and Graphs, in contexts which are meaningful and of interest to their students. Possible contexts for this unit are Earning and managing money and Nutrition and health.

It is assumed that an extensive range of technological applications and techniques will to be used in teaching this unit. The ability to choose when or when not to use some form of technology, and the ability to work flexibly with technology, are important skills.

The number formats for the unit are whole numbers, decimals, common fractions, common percentages, square and cubic numbers written with powers.

Year 12: Units 3 & 4

Unit 3

This unit provides students with the mathematical skills and understanding to solve problems related to measurement, scales, plans and models, drawing and interpreting graphs and data collection. Students use the mathematical thinking process and apply the statistical investigation process. Teachers are encouraged to apply the content of the four topics in this unit: Measurement; Scales, plans and models; Graphs in practical situations; and Data collection, in a context which is meaningful and of interest to the students. A variety of approaches could be used to achieve this purpose. Possible contexts for this unit are Construction and design, and Medicine.

It is assumed that an extensive range of technological applications and techniques will be used in teaching this unit. The ability to choose when, and when not, to use some form of technology, and the ability to work flexibly with technology, are important skills.

The number formats for the unit are positive and negative numbers, decimals, fractions, percentages, rates, ratios, square and cubic numbers written with powers and square roots.

Unit 2

This unit provides students with the mathematical skills and understanding to solve problems related to representing and comparing data, percentages, rates and ratios and time and motion. Students further develop the use of the mathematical thinking process and apply the statistical investigation process. The statistical investigation process should be explicitly taught in conjunction with the statistical content within this unit. Teachers are advised to apply the content of the four topics in this unit: Representing and comparing data; Percentages; Rates and ratios; and Time and motion, in a context which is meaningful and of interest to their students. Possible contexts for this unit are Transport and Independent living.

It is assumed that students will be taught this course with an extensive range of technological applications and techniques. The ability to be able to choose when or when not to use some form of technology and to be able to work flexibly with technology are important skills.

The number formats for the unit are whole numbers, decimals, fractions and percentages, rates and ratios.

Unit 4

This unit provides students with the mathematical skills and understanding to solve problems related to probability, earth geometry and time zones, loans and compound interest. Students use the mathematical thinking process and apply the statistical investigation process to solve problems involving probability. Teachers are advised to apply the content of the three topics in this unit: Probability and relative frequencies; Earth geometry and time zones; and Loans and compound interest, in a context which is meaningful and of interest to the students. Possible contexts for this unit are Finance, and Travel.

It is assumed that an extensive range of technological applications and techniques will be used in teaching this unit. The ability to choose when, and when not, to use some form of technology, and the ability to work flexibly with technology, are important skills.

The number formats for the unit are positive and negative numbers, decimals, fractions, percentages, rates, ratios and numbers expressed with integer powers.

Chemistry ATAR

Course Description

The Chemistry ATAR course develops students' understanding of the key chemical concepts and models of structure, bonding, and chemical change, including the role of chemical, electrical and thermal energy. Students learn how models of structure and bonding enable chemists to predict properties and reactions and to adapt these for particular purposes. They will understand the fundamental chemistry behind protein synthesis, production of biofuel and ethanol, industrial process such as the Haber and Contact process, analytical techniques and acid chemistry, such as buffers, implications of changes to pH and the effect this has on our environment. Students will also develop skills that will allow them to quantitatively analyse different chemical processes.

Year 11 Pre-requisites:

- B grade in Year 10 Science (Minimum of 60% in Year 10 examinations, 70% for Chemistry) and
- C grade in Year 10A Mathematics (Minimum of 50% in Year 10 Examinations) or
- B grade in Year 10 Standard Mathematics (Minimum of 65% in Year 10 Examinations)

Year 11: Units 1 & 2

Unit 1: Chemical fundamentals: structure, properties and reactions

In this unit, students use models of atomic structure and bonding to explain the macroscopic properties of materials. Students develop their understanding of the energy changes associated with chemical reactions and the use of chemical equations to calculate the masses of substances involved in chemical reactions.

Unit 2: Molecular interactions and reactions

In this unit, students continue to develop their understanding of bonding models and the relationship between structure, properties and reactions, including consideration of the factors that affect the rate of chemical reactions. Students investigate the unique properties of water and the properties of acids and bases, and use chemical equations to calculate the concentrations and volumes of solutions involved in chemical reactions.

Year 12: Units 3 & 4

Unit 3: Equilibrium, acids and bases, and redox reactions

In this unit, students investigate the concept of reversibility of reactions and the dynamic nature of equilibrium in chemical systems; contemporary models of acid-base behaviour that explain their properties and uses; and the principles of oxidation and reduction reactions, including the generation of electricity from electrochemical cells.

Unit 4: Organic chemistry and chemical synthesis

In this unit, students develop their understanding of the relationship between the structure, properties and chemical reactions of different organic functional groups. Students also investigate the process of chemical synthesis to form useful substances and products and the need to consider a range of factors in the design of these processes.

Human Biology ATAR

Course Description

The Human Biology ATAR course gives students a chance to explore what it is to be human—how the human body works, the origins of human variation, inheritance in humans, the evolution of the human species and population genetics. Through their investigations, students research new discoveries that increase our understanding of human dysfunction, treatments and preventative measures.

Practical tasks are an integral part of this course and develop a range of laboratory skills; for example, biotechnology techniques. Students learn to evaluate risks and benefits to make informed decisions about lifestyle and health topics, such as diet, alternative medical treatments, use of chemical substances and the manipulation of fertility.

Year 11 Pre-requisites: B Grade in Year 10 Science (Minimum of 65% in Year 10 Examinations).

Year 11: Units 1 & 2	Year 12: Units 3 & 4
Unit 1: The functioning human body	Unit 3: Homeostasis and disease
In this unit, students analyse how the structure and function of body systems, and the interrelationships between systems, support metabolism and body functioning.	This unit explores the nervous and endocrine systems and the mechanisms that help maintain the systems of the body to function within normal range, and the body's immune responses to invading pathogens.
Unit 2: Reproduction and inheritance	Unit 4: Human variation and evolution
In this unit, students study the reproductive systems of males and females, the mechanisms of transmission of genetic material from generation to generation, and the effects of the environment on gene expression.	This unit explores the variations in humans, their changing environment and evolutionary trends in hominids.

Human Biology General

Course Description

Students will learn about themselves, relating the structure of the different body systems (anatomy) to their function (physiology) and understanding the interdependence of these systems in maintaining life. Reproduction, growth and development of the unborn baby are studied to develop an understanding of the effects of lifestyle choices.

Students will engage in activities exploring the coordination of the musculoskeletal, nervous and endocrine systems. They explore the various methods of transmission of diseases and the responses of the human immune system.

Students research new discoveries that help increase our understanding of the causes and spread of disease in a modern world. This is particularly relevant in today's society. They will learn to think critically, evaluate evidence, solve problems, and effectively communicate their understanding in scientific ways.

The intention of the course is to assist students in becoming rational and responsible citizens with the skills to evaluate risks and identify ethical concerns and benefits in order to make informed decisions about matters relating to lifestyle and health.

Year 11: Units 1 & 2

Unit 1: Healthy body

This unit explores how the structure and function of cells help to sustain life processes, and the role of the digestive system in providing essential nutrients for the musculoskeletal system. It also explores how the dietary decisions we make can affect the functioning of body cells and our quality of life.

Unit 2: Reproduction

This unit explores circulatory, respiratory and urinary systems, and how they facilitate the exchange, transport and removal of materials for efficient body functioning. It also explores the importance of regular health checks to prevent or manage medical problems.

Year 12: Units 3 & 4

Unit 3: Coordination

This unit explores how the male and female reproductive systems are specialised for successful fertilisation and implantation, and the development of the embryo and foetus. It also explores how lifestyle choices can impact personal reproductive health, fertility and the delivery of a healthy baby. Contraceptive methods and assisted reproductive technologies are also explored.

Unit 4: Infectious disease

This unit explores the causes and spread of disease and how humans respond to invading pathogens. It also explores the importance of coordinated community and global responses for the prevention and control of infectious disease transmission.

Biology ATAR

Course Description

A unique appreciation of life and a better understanding of the living world are gained through studying the Biology ATAR course. This course encourages students to be analytical, to participate in problem-solving and to systematically explore fascinating and intriguing aspects of living systems, from the microscopic level through to ecosystems.

Students develop a range of practical skills and techniques through investigations and fieldwork in authentic contexts, such as marine reefs, endangered species, urban ecology, or biotechnology. Scientific evidence is used to make informed decisions about controversial issues.

Year 11 Pre-requisites: B Grade in Year 10 Science.

Year 11: Units 1 & 2

Unit 1: Ecosystems and biodiversity

In this unit, students investigate and describe a number of diverse ecosystems, exploring the range of biotic and abiotic components to understand the dynamics, diversity and underlying unity of these systems. Students use classification keys to identify organisms, describe the biodiversity in ecosystems, investigate patterns in relationships between organisms, and aid scientific communication. Fieldwork is an important part of this unit. Fieldwork provides valuable opportunities for students to work together to collect first-hand data and to experience local ecosystem interactions.

Unit 2: From single cells to multicellular organisms

In this unit, students examine inputs and outputs of cells to develop an understanding of the chemical nature of cellular systems, both structurally and functionally, and the processes required for cell survival. Students examine the structure and function of plant and animal systems at cell and tissue levels in order to describe how they facilitate the efficient provision or removal of materials to and from all cells of the organism. Students consider the ethical considerations that apply to the use of living organisms in research.

Year 12: Units 3 & 4

Unit 3: Continuity of species

In this unit, students investigate the biochemical and cellular systems and processes involved in the transmission of genetic material to the next generation of cells and to offspring. Students investigate the genetic basis for the theory of evolution by natural selection through constructing, using and evaluating explanatory and predictive models for gene pool diversity of populations. They investigate the ways in which science contributes to contemporary debate about local, regional and international issues, and recognise the limitations of science to provide definitive answers in different contexts.

Unit 4: Surviving in a changing environment

In this unit, students investigate how homeostatic response systems control organisms' responses to environmental change – internal and external – in order to survive in a variety of environments, as long as the conditions are within their tolerance limits. Through the investigation of appropriate contexts, students explore the ways in which models and theories of organisms' and populations' responses to environmental change have developed over time. Students use science inquiry skills to investigate a range of responses by plants and animals to changes in their environments.



Course Description

Physics is the study of matter, energy, and their interactions, helping us understand the natural world and our role as stewards of the Earth. It enables students to explore how energy explains a wide range of phenomena, from everyday occurrences to complex scientific processes. Students learn about advanced theories, such as quantum theory, relativity, and the Standard Model, which help explain more intricate phenomena and lead to the development and refinement of scientific models.

The course highlights physics' contribution to solving global challenges, including its applications in engineering, renewable energy, communication, new material development, transport, vehicle safety, medical science, climate change, and space exploration. Studying physics equips students with valuable skills for further study and careers, while fostering informed decision-making and critical thinking, essential for evaluating scientific issues in a rapidly changing world.

Year 11 Pre-requisites: B grade in Year 10A Mathematics (Minimum of 60% in Year 10 Examinations).

Year 11: Units 1 & 2	Year 12: Units 3 & 4
Unit 1: Motion, forces and energy	Unit 3: Gravity and relativity
Students describe, explain and predict linear motion and mechanical and thermal energy.	Students investigate models of motion in gravitational, electric and magnetic fields to explain how forces act at a distance. They examine the theory of special relativity and the consequences of general relativity.
Unit 2: Waves, nuclear and electrical physics	Unit 4: Electromagnetism and modern physics
Students investigate the application of wave models to sound phenomena, radioactivity and nuclear reactions, and investigate energy transfer and transformation in electrical circuits.	Students use the theory of electromagnetism to explain the production and propagation of electromagnetic waves and investigate how shortcomings in existing theories led to the development of the quantum theory of light and matter.

Psychology ATAR

Course Description

In the Psychology ATAR Course students will be introduced to psychological knowledge which supports an understanding of the way individuals function in groups. Students learn about major psychological models and theories, and the methods used to conduct scientific investigations in the discipline of psychology. Students apply research methods and ethical principles as they analyse data to illustrate how empirical procedures are used to examine phenomena, such as memory, attention, attitudes, personality and group behaviour. Acquiring this foundation of scientific method and critical thinking is a valuable skill which students can apply throughout their study, work and everyday lives.

Year 11 Pre-requisites:

- 60% in Year 10 Science
- 60% in Year 10 English

Year 11: Units 1 & 2

Unit 1: Biological and lifespan psychology

This unit introduces psychology as an inquiry-based discipline, focusing on theories, studies, and models that explain human emotion, cognition, and behaviour. Students learn about the structure of the central nervous system and its impact on how humans think, feel, and behave, along with methods used to study the brain. The unit emphasises lifespan psychology, particularly adolescent development, and explores how developmental changes affect thoughts, feelings, and behaviours. Students also examine attachment and developmental stages according to key theorists. Building on prior science inquiry skills developed in Year 7 -10, students apply these to analyse psychological studies.

Unit 2: Attitudes, stereotypes and social influence

This unit explores the influence of others on human behaviour, cognition, and emotion. Students examine attitudes, using the tripartite model to deepen their understanding, and explore theories of cognitive dissonance, social identity, and attribution through relevant studies, applying these to real-world situations. The unit also covers social influences, including the role of stereotypes and the connection between attitudes, prejudice, and discrimination. Students learn about the impact of social influence on prosocial and antisocial behaviour development.

Year 12: Units 3 & 4

Unit 3: Memory and learning

This unit focuses on cognitive psychology, exploring how humans develop understanding and apply it to the world. Core topics include memory and learning, with theories based on psychological research.

Students examine the roles of sensation, perception, and attention in memory, apply memory models, and learn how brain structures influence memory processes, including forgetting. The unit also covers learning theories such as classical conditioning, operant conditioning, and social learning theory, applying them to real-world behaviour modification.

Unit 4: Psychology of motivation, wellbeing and health

This unit focuses on understanding human cognition, emotion, and behaviour to improve individual and group wellbeing. Students explore the relationship between motivation and wellbeing, applying this to stress and sleep management strategies. The unit examines theories and models of motivation and wellbeing, along with the links between stress, sleep, and wellbeing. Students learn psychological models and techniques to enhance wellbeing in these areas.

Psychology GENERAL

Course Description

Psychology is the scientific study of how people think, feel, and behave, aiming to understand human development through systematic, evidence-based methods. This course introduces students to psychological knowledge about the self and others, covering areas such as cognition, biological bases of behaviour, and personality. It also explores how individuals function within groups, focusing on socialisation, moral development, attitude formation, and communication. Additionally, students learn how culture shapes values, attitudes, and beliefs within different contexts.

Year 11: Units 1 & 2

Unit 1:

This unit provides a general introduction to personality and intelligence. Students explore a number of influential theories including Freud's psychodynamic approach, Eysenck's trait theory and Spearman's theory of general intelligence. Beyond the individual, the impact of culture and others on behaviour is a key focus. Students examine agents of socialisation and the role of verbal and nonverbal communication in initiating, maintaining and regulating relationships. Students are introduced to qualitative and quantitative methods of data collection and explore fundamental ethical considerations pertinent to psychological research.

Year 12: Units 3 & 4

Unit 3:

This unit expands on personality theories studies in Unit 1. Students apply knowledge and understandings to explore how personality can shape motivation and performance and how personality testing is used in vocational contexts. Students are introduced to different states of consciousness and the role of sensation, perception and attention in organising and interpreting information. Relational influences, including factors which determine friendships and conflict resolution, are explored. Students expand on their vocabulary of psychological terminology as they apply research methods and ethical principles.

Unit 2:

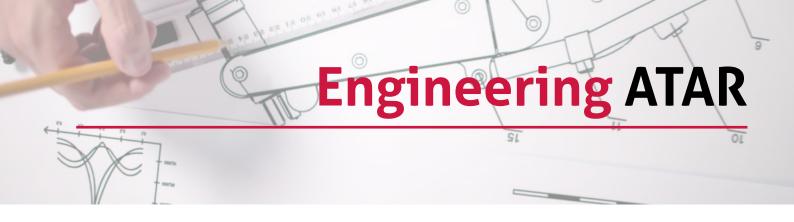
This unit introduces students to the human brain and the impact of factors influencing behaviour, emotion and thought. The scientific study of development is an important component of psychology and students review aspects of development and the role of nature and nurture.

Students learn about stages of development and the impact of external factors on personality development. The impact of group size on behaviour and the influence of culture in shaping attitudes is explored. Students interpret descriptive data and apply it to create tables, graphs and diagrams, distinguish patterns and draw conclusions.

Unit 4:

This unit explores brain function and scanning techniques to illustrate the link between the brain and behaviour. Students learn about Piaget's theory of cognitive development, Kohlberg's theory of moral development and the role of nature and nurture.

The impact of the environment on individuals is examined through the study of behaviours observed in groups, causes of prejudice and ways of reducing prejudice. Students continue to develop and apply their understanding of psychological research and data collection methods



Course Description

Engineers design, manufacture, and maintain products and infrastructure essential to society, business, and industry. They use creativity, problem-solving, and scientific principles to develop solutions, while considering environmental, sustainable energy, and social issues.

The Engineering Studies ATAR course allows students to investigate, design, and create products, applying engineering processes and scientific principles. It blends theoretical and practical learning to explore the connections between engineering and society, preparing students for careers in engineering and technology.

Year 11: Units 1 & 2

Unit 1

In this unit, students use the engineering design process to address a design brief focused on a problem, need, or opportunity. They research similar products, materials, and components to develop design ideas through annotated sketches and concept drawings.

After selecting the most suitable concept, students finalise the design with orthographic drawings, specialist diagrams, material lists, and costings. Following a timeline, they produce the product, including testing and evaluation.

The unit also covers core and specialist theory to explain the scientific, mathematical, and technical concepts behind engineered products, as well as the environmental, societal, and industrial impacts of renewable and non-renewable energy.

Year 12: Units 3 & 4

Unit 3

In this unit, students deepen their understanding of core and specialist theory, while studying the impacts of renewable and non-renewable energy on society, business, and the environment.

They apply the engineering design process, starting with a comprehensive design brief focused on a problem, need, or opportunity.

Students engage in research, sketching, and analysing existing products and materials, selecting the most promising concept for production as a prototype or working model. They refine their skills by producing, testing, and evaluating the product.

Unit 2

In this unit, students apply the engineering design process to enhance their knowledge and skills, enabling them to complete, test, and evaluate their major project.

They continue studying core and specialist theory to deepen their understanding of the scientific, mathematical, and technical concepts behind engineered products.

Students also explore different forms of obsolescence in engineering, analysing their impacts on society, the environment, and industry.

Unit 4

In this unit, students analyse the stages in the life cycle of engineering products and their impacts on society, business, and the environment.

They continue refining their understanding and skills of the engineering design process through tasks to produce, test, and evaluate their product.

Core and specialist theory is further studied to deepen their understanding of the scientific, mathematical, and technical concepts behind engineered products.

Engineering GENERAL

Course Description

The Engineering Studies ATAR course prepares students for a future in an increasingly technological world by combining theoretical and practical learning in real-life contexts. Students apply engineering processes, develop technical skills, and explore the role of engineering in society. Engineers use creativity, problem solving, and scientific and mathematical principles to design, build, and maintain essential products and infrastructure. They also consider broader issues such as sustainability, environmental impact, and community needs. This course is ideal for students interested in engineering and related industries.

Year 11: Units 1 & 2

Unit 1

In this unit, students follow an engineering design process to respond to a design brief focused on a problem, need or opportunity. They research similar products, materials and components to develop design ideas through annotated sketches and concept drawings.

After selecting and analysing the most suitable concept, students finalise their design with orthographic drawings, specialist diagrams, material lists and costings. Guided by a timeline, they produce a prototype or working model, including testing and evaluation. Theoretical studies support practical work, covering scientific, mathematical and technical principles, along with the impact of renewable and non-renewable energy on society, the environment and industry.

Year 12: Units 3 & 4

Unit 3

In this unit, students deepen their understanding of core and specialist engineering theory, while examining the impacts of renewable and non-renewable energy use on society, business and the environment. They apply the engineering design process, starting with a detailed design brief centred on a problem, need or opportunity.

Through research into existing products, materials and components, and through sketching, drawing and analysis, students develop and justify a design for a prototype or working model. They refine their skills by producing, testing and evaluating their solution.

Unit 2

In this unit, students apply the engineering design process to complete, test and evaluate their major project. They continue to build on core and specialist theory, deepening their understanding of the scientific, mathematical and technical principles behind engineered products.

Students also explore different forms of obsolescence and analyse their impacts on society, the environment and industry.

Unit 4

In this unit, students deepen their understanding of core and specialist theory, focusing on the scientific, mathematical and technical concepts behind engineered products.

They study the impact of obsolescence in engineering on society, business and the environment. Students refine their engineering design process by developing a design brief and engaging in activities to investigate constraints, materials and components.

Design ideas are developed through annotated sketches and concept drawings, leading to the selection and analysis of the best concept for production as a prototype or working model.

Computer Science ATAR

Course Description

The Computer Science ATAR course builds on concepts from Digital Technologies, enhancing students' analysis and algorithm design skills to create digital solutions for real-world problems. It fosters computational, algorithmic, and systems thinking, applicable across various domains. The course also covers software development, networking, data management, and cyber security. As data management becomes crucial in an increasingly digital world and cyber security grows in importance with more connected devices, there is a demand for emerging experts in these fields.

Year 11: Units 1 & 2

Unit 1: Design and development of programming and network solutions

In this unit, students develop skills to create software solutions using algorithms and structured programming. They explore the interactions between users, developers, law, ethics, and society in system development, while learning about network communications and data transfer.

Unit 2: Design and development of database solutions and cyber security considerations

In this unit, students learn design concepts and tools for developing relational database systems, creating database solutions and queries to extract information. They explore network security, examining threats and protective measures.

Additionally, students assess the ethical and legal responsibilities of users and developers in data collection and storage, and the impact of computer systems on society.

Year 12: Units 3 & 4

Unit 3: Design and development of programming and networking solutions

In this unit, students learn to create software solutions using algorithms, structured programming, and object-oriented techniques. They explore the interactions between users, developers, law, ethics, and society in system development. The course emphasizes network communications and data transfer. Students follow an iterative development process, including problem investigation, solution design, development, and evaluation.

Unit 4: Design and development of database solutions and cyber security considerations

In this unit, students learn design concepts and tools for developing relational database systems, acquiring skills to create database solutions and queries. They explore network security, examining threats and protective measures.

Students also evaluate the attitudes, values, and ethical and legal responsibilities involved in data collection, storage, and the societal impact of computer systems. The unit emphasises following the technology process—investigate, design, produce, and evaluate—to create quality solutions.



Course Description

In the Computer Science General Course students are introduced to the fundamental principles, concepts and skills within the field of computing. They learn how to diagnose and solve problems while exploring the building blocks of computing. Students explore the principles related to the creation of computer and information systems; software development; the connectivity between computers; the management of data; the development of database systems; and the moral and ethical considerations for the use of computer systems. This course provides students with the practical and technical skills that equip them to function effectively in a world where these attributes are vital for employability and daily life in a technological society.

Year 11: Units 1 & 2

Unit 1: Personal use of computer systems

This unit provides students with the knowledge and skills required to use and maintain a personal computer. It introduces a formal method for developing simple information systems and databases. While considering personal needs, students examine the social, ethical and legal implications of personal computer use.

Unit 2: Personal use of communication and information systems

This unit introduces a formal method for developing networks and internet technologies and writing a sequence of simple instructions. Students examine the social, ethical and legal implications associated with software development.

Year 12: Units 3 & 4

Unit 3: Developing computer-based systems and producing spreadsheets and database solutions

The focus for this unit is on developing computer-based systems and producing spreadsheet and database solutions. Students are introduced to the internal, interrelating components of computer-based systems in an industry context. They examine a variety of systems, build on their spreadsheet and database skills and gain an appreciation of how these concepts and technologies are used in industry.

Unit 4: Developingg computer-based systems solutions and communications

Students are introduced to networking concepts, as applied to industry. Through the use of algorithms, students develop programming skills. Students create solutions exploring the ethical, legal and societal implications of industry-based applications.

Materials Design and Technology (Wood) GENERAL

Course Description

The Materials Design and Technology General course is a practical course. Students can choose to work with metal, textiles or wood, with the design and manufacture of products as the major focus. Students have the opportunity to develop and practise skills that contribute to creating a physical product, while acquiring an appreciation of the application of a design process, and an understanding of the need for materials sustainability. Students will learn and practise manufacturing processes and technologies, including principles of design, planning and management.

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Unit 1: Design

Students interact with a variety of items that have been specifically designed to meet certain needs. Students are introduced to the fundamentals of design. They learn to communicate various aspects of the technology process by constructing what they design.

Unit 2: Design for a specific market

They use a range of techniques to gather information about existing products and apply the fundamentals of design. Students learn to conceptualise and communicate their ideas and various aspects of the design process within the context of constructing what they design.

Year 12: Units 3 & 4

Unit 3: Fundamentals of design

Students develop an understanding of the elements and fundamentals of design and consider human factors involved in the design, production and use of their projects. They develop creative thinking strategies and work on design projects within specified constraints.

Unit 4: Designing for a client, target audience or market

Students learn about the nature, properties and environmental impacts related to a variety of materials, and production techniques. Students apply an understanding of the elements and fundamentals of design and consider human factors involved in their design projects.

Physical Education Studies ATAR

Course Description

Physical Education Studies contributes to the development of students' physical, social and emotional growth. In the Physical Education Studies ATAR course students learn about physiological, psychological and biomechanical principles, and apply these to analyse and improve personal and group performances in physical activities. Throughout the course, students learn through integrated written, oral and active learning experiences. The course also provides students with opportunities to develop skills that will enable them to pursue personal interests and potential in physical activity as athletes, coaches, officials, administrators and/or volunteers.

Year 11: Units 1 & 2	Year 12: Units 3 & 4
Unit 1	Unit 3
The focus of this unit is to explore the physiological effects of training and the body's responses to physical activity. Content will focus on various aspects of functional anatomy and how they may improve performance in physical activity. The focus of this unit is to identify the relationship between skill, tactics and the body in order to improve the effectiveness and efficiency of performance.	The focus of this unit is to extend student understanding of acquired functional anatomy and exercise physiology.

Unit 2

The focus of this unit is to explore biomechanical concepts, skilled movement analysis, and the effects of feedback on sporting performance. Content will focus on the effects of psychological considerations on performance in various physical activities. The focus of this unit is to identify the relationship between skill, tactics and the body in order to improve the effectiveness and efficiency of performance.

Unit 4

The focus of this unit is to extend student understanding of acquired biomechanical, psychological and motor learning and coaching concepts to evaluate their own and others' performance.

The course content is divided into six interrelated content areas:

- Developing physical skills and tactics
- Motor learning and coaching
- Functional anatomy
- Biomechanics
- Exercise physiology
- Sport psychology.

Physical Education Studies GENERAL

Course Description

Physical Education Studies contributes to the development of students' physical, social and emotional growth. The Physical Education Studies General course provides students with opportunities to understand and improve performance through the integration of theoretical concepts and practical activities. Through engagement as performers, leaders, coaches, analysts and planners of physical activity, students may develop skills that can be utilised in leisure, recreation, education, sport development, youth work, health and medical fields.

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Unit 1

The focus of this unit is the development of knowledge, understanding and application of anatomical, physiological and practical factors associated with performing in physical activities. The unit will focus on developing physical skills and tactics. Students will learn about related principles, including the major functions of bones, the role of biomechanics, components of performance related fitness, and mental preparation for physical activity.

Year 12: Units 3 & 4

Unit 3

The focus of this unit is simple movement, biomechanical, physiological, psychological, functional anatomy and motor learning concepts. The understanding of the relationship between skill, movement production and fitness will be further enhanced as students develop and improve.

Unit 2

Students study the impact of physical activity on the body's anatomical and physiological systems. They are introduced to concepts that support performance as team members and individuals, including the basic elements of a training session, the function of the circulatory system, biomechanical principles relating to motion, the response of the respiratory system to exercise and mind sets to improve performance.

Unit 4

The focus of this unit is for students to assess their own and others' movement competency and identify areas for improvement. They will build on their knowledge of training principles, nutrition and goal setting concepts to enhance their own and others' performance in physical activity.

Vocational Education and Training (VET) Courses

At Ellenbrook Christian College, Vocational Education and Training (VET) programs provide Year 11 and 12 students with the opportunity to engage in practical, hands-on learning that prepares them for the workforce while earning industry-recognised qualifications.

VET programs are designed to develop job-ready skills and industry-specific knowledge, helping students gain expertise in a wide range of fields, including construction, engineering, business, healthcare, and customer service. These courses equip students with the technical and professional skills needed for future employment or further training.

In addition to providing valuable workplace experience and formal qualifications, VET programs contribute towards the Western Australian Certificate of Education (WACE). For more information, refer to the WACE Requirements section.

VET at Ellenbrook Christian College offers flexibility, allowing students to combine vocational studies with traditional academic subjects, ensuring they can pursue both their career aspirations and educational goals.

How to Study VET at Ellenbrook Christian College

At Ellenbrook Christian College, students have two options for studying VET:

1. Studying VET at the College (Onsite)

Studying VET at the College is offered to all Year 11 and Year 12 students, regardless of their chosen pathway. These courses provide students with valuable practical skills while continuing their core studies. However, students following the ATAR pathway may only enrol in Certificate II courses.

The VET courses available, coordinated through IVET (a registered training organisation), include:

- Certificate III in Business (available to students following the *General / Hybrid pathway)
- Certificate II in Workplace Skills (available to students following the *General/ Hybrid/ ATAR pathway)
- Certificate II in Sports and Recreation (available to students following the *General/ Hybrid/ ATAR pathway; ATAR students may only select this certificate if they have Physical Education Studies as a school subject)

*Please note that students following the General pathway are required to complete one of the aforementioned certificates as part of their school subject selection.

Explore IVET and our certificate programs by visiting https://ivet.edu.au/

2. Studying VET Externally at North Metropolitan TAFE (NMTAFE) (Offsite)

Additionally, students may complete a VET certificate externally at North Metropolitan TAFE (NMTAFE). This option is available only to students following the General/Hybrid pathway. To enrol for a certificate at NMTAFE, students must apply formally for their chosen course.

The minimum application requirements include:

- A C grade or higher in English and Maths
- Passing NAPLAN/OLNA
- A strong motivation for wanting to study the chosen course

It's important to note that applications are competitive, and meeting or exceeding the minimum criteria improves the chances of being offered a place in the desired certificate program. Students can also provide additional supporting information, such as:

- Resume
- References
- Certificates (e.g., leadership, sporting, first aid)

The application and enrolment process at NMTAFE is facilitated by the College's VET Support Officer, who will assist students throughout the process.

For more information about VET Delivered to Secondary Students at NMTAFE and the certificate programs they offer, click here: <u>VET Delivered to Secondary Students at NMTAFE.</u>

Coordinator

Mrs Tanya Camacho tanya.camacho@ellenbrook.wa.edu.au

VET Onsite

Certificate II in Workplace Skills (BSB20120)

Course Description

Physical Education Studies contributes to the development of students' physical, social and emotional growth. The Physical Education Studies General course provides students with opportunities to understand and improve performance through the integration of theoretical concepts and practical activities. Through engagement as performers, leaders, coaches, analysts and planners of physical activity, students may develop skills that can be utilised in leisure, recreation, education, sport development, youth work, health and medical fields.

Learning Areas	Delivery Method
 Planning and preparation Prioritisation and time management Teamwork and workplace etiquette Effective work habits Common digital technologies Common business applications Safe and sustainable work practices Communication skills Teamwork and workplace etiquette Critical thinking and basic problem solving 	 Duration: 1 / 2-year course – Years 11 and 12 Time off campus: Nil. Teachers facilitate timetabled lessons on campus in conjunction with the Registered Training Organisation. Prerequisites: Nil Subject Fee: Refer to School Fee Schedule

Assesment Profile:

The VET course is competency based and students will be assessed on the elements required in each unit. Students will need to demonstrate that they are competent against the standards that have been developed. This course is offered in partnership with IVET.



RTO Code: 40548

VET Onsite

Certificate II in Sport and Recreation (SIS20122)

Course Description

IVET's program for the new Certificate II in Sport & Recreation has a focus on practical involvement in the sport, fitness and recreation industry. The course is for students to develop the skills and knowledge to assist with the delivery of sport and recreation activities, performing various participant contact and equipment maintenance duties. Completing the selected units is a great foundation for students wanting to contribute to their community sports club or start in an assistant-level role in a sport, fitness or recreation organisation. Learning opportunities for students are hands-on, with the added benefit of keeping a range of future career options open.

Career Pathway		
 Customer service assistant Leisure assistant Recreation assistant Retail assistant Grounds assistant Facility assistant 		

Delivery Method

- Duration: 1 / 2-year course Years 11 and 12
- Time off campus: Nil. Teachers facilitate timetabled lessons on campus in conjunction with the Registered Training Organisation.
- Prerequisites: Nil
- Subject Fee: Refer to School Fee Schedule

Assesment Profile:

The VET course is competency based and students will be assessed on the elements required in each unit. Students will need to demonstrate that they are competent against the standards that have been developed. This course is offered in partnership with IVet.

RTO Code: 40548

VET Onsite

Certificate III in Business (BSB30120)

Course Description

This qualification reflects the varied roles of individuals across different industry sectors who apply a broad range of competencies using some discretion, judgement and relevant theoretical knowledge. Students will develop and build teamwork, interpersonal skills and organisational capabilities which can be used to further strengthen their employability skills postsecondary schooling.

The importance of digital literacy in the workforce will be addressed, and students will gain a deeper understanding of its importance to their work lives. The course is delivered over 1-2 years depending on the individual school and time allocated within the school framework.

Learning Areas	Delivery Method
 Planning and preparation Prioritisation and time management Teamwork and workplace etiquette Effective and inclusive work habits Common digital technologies Common business software applications Presentation skills Safe and sustainable work practices Communication skills Teamwork and workplace etiquette Critical thinking and basic problem solving Stress management and personal well being 	 Duration: 2-year course – Years 11 and 12 Time off campus: Nil. Teachers facilitate timetabled lessons on campus in conjunction with the Registered Training Organisation. Prerequisites: Nil Subject Fee: Refer to School Fee Schedule

Assesment Profile:

The VET course is competency based and students will be assessed on the elements required in each unit. Students will need to demonstrate that they are competent against the standards that have been developed. This course is offered in partnership with IVet.

RTO Code: 40548

Endorsed Programs

At Ellenbrook Christian College, endorsed programs provide senior secondary students with valuable learning experiences that contribute to their WACE. These programs are either developed by the School Curriculum and Standards Authority (SCSA) or by schools and private providers and later endorsed by the Authority.

Each endorsed program consists of a structured series of lessons, activities, or experiences designed to help students achieve specific learning outcomes. At Ellenbrook Christian College, these programs may be delivered as part of the curriculum or offered as extra-curricular activities, allowing students to engage in meaningful, real-world learning.

All successfully completed endorsed programs, once reported to SCSA by the College:

- Are listed on the student's Western Australian Statement of Student Achievement (WASSA).
- May contribute towards the depth requirement of the WACE.
- May count towards the C grade requirement of the WACE.

Each endorsed program is assigned one to four unit equivalents, and students can count a maximum of four-unit equivalents towards their WACE—with up to two units in Year 11 and two in Year 12.

By participating in endorsed programs at Ellenbrook Christian College, students gain practical experience, develop key skills, and enhance their academic achievements while working towards their WACE.

Endorsed Program Curtin UniReady

Program Description

The UniReady program can help you qualify for entry into a range of undergraduate courses. Successful completion of the program will fulfil the minimum admission criteria or an ATAR of 70 and English proficiency.

This program is an excellent option if the student:

- missed out on Curtin's indicative ATAR
- did not generate an ATAR as they completed general studies
- did not complete their high school studies
- are undertaking or completed vocational studies and now want to go to University
- are 20 years or older.

Learning Objectives

- At the completion of the UniReady program, the student will be able to: demonstrate effective communication skills within academic settings, preparing for the requirements of an undergraduate degree.
- apply academic and independent learning skills and practices relevant to the university environment and future undergraduate study
- develop digital literacy skills to effectively collect, collate and communicate information in a tertiary setting.

- demonstrate proficiency in a variety of quantitative concepts applying skills to analyse and perform computational calculations, problem solve, and make data-driven decisions
- demonstrate understanding of discipline knowledge appropriate to university entry level
- develop reflective and critical thinking practices to support future university studies

Delivery Method

- Year level: Year 12
- Duration: 3 terms Years 12
- Time off campus: Nil.
- Prerequisites: Overall average = 65%; completion of OLNA Level 3 in Reading, Writing and Numeracy
- Fee: Refer to School Fee Schedule

Program Coordinator

Mrs Carole Kelava Carole.kelava@ellenbrook.wa.edu.au

Endorsed Program

Authority Developed Workplace Learning (ADWPL)

Program Description

At Ellenbrook Christian College, the Authority-Developed Workplace Learning (ADWPL) program provides senior students with the opportunity to gain real-world work experience while earning credit towards their WACE.

Endorsed by the School Curriculum and Standards Authority (SCSA), this program helps students develop essential employability skills in a structured and supervised workplace environment. It serves as a valuable steppingstone for those considering future careers, vocational pathways, or higher education opportunities.

How ADWPL works at Ellenbrook Christian College

1. Student Referral

Students are referred to the VET Support Officer by the Head of Practice and Pedagogy.

2. Placement Coordination & Documentation

Students receive an ADWPL application form, identify a workplace, and complete the required details. The VET Support Officer reviews submissions, coordinates with employers, and conducts workplace checks for safety and compliance. Once approved, confirmation emails are sent to the student, parent/guardian, and employer.

3. Workplace Learning Commences

Students begin their structured work placement, gaining real-world experience.

4. Program Requirements

Students maintain a Workplace Learning Logbook and Skills Journal to document tasks, responsibilities, and skill development. The Careers & VET Coordinator provides ongoing support throughout the placement.

Benefits to Students

Participating in ADWPL offers students valuable personal and professional benefits, including:

- **Earning WACE Credit** Workplace learning contributes towards WACE achievement.
- Gaining First-Hand Workplace Experience Prepares students for the transition from school to employment
- **Developing Core Employability Skills** Enhances communication, teamwork, problem-solving, and initiative
- **Connecting School Studies to Real-World Work** Helps students understand how their academic learning applies in a professional setting.

- **Exploring Career Pathways** Provides insights into different industries and helps students determine if a particular career aligns with their interests.
- Building Confidence and Independence Encourages self-reliance and personal growth.
- Enhancing Future Employment Prospects Strengthens resumes and career readiness, making students more competitive in the job market. Fee: Refer to School Fee Schedule

Assesment and Recognition

- Students must successfully complete their pre-placement SmartMove online certificate, Workplace Learning Logbook and Skills Journal to receive credit.
- ADWPL is non-graded, but it is formally recorded on the Western Australian Statement of Student Achievement (WASSA) and contributes to WACE completion.
- For every 55 hours of completed workplace learning, students earn 1 unit of equivalence.
- A maximum of 4 units can be earned towards WACE.

Program Coordinator

Mrs Tanya Camacho tanya.camacho@ellenbrook.wa.edu.au

Endorsed Program

Authority Developed Community Service (ADCS)

Program Description

Serve your community while earning WACE credit

At Ellenbrook Christian College, the Authority-Developed Community Service (ADCS) program provides Year 11 and 12 students with the opportunity to engage in meaningful community service while earning credit towards their WACE.

This 55-hour program requires students to complete at least 50 hours of community service and up to five hours of induction and reflection.

Endorsed by the School Curriculum and Standards
Authority (SCSA), this program allows students to make
a real impact by volunteering in structured, supervised
community service roles. Through ADCS, students not
only develop key life skills but also demonstrate Christian
values of service, compassion, and leadership—an integral
part of the Ellenbrook Christian College ethos.

How ADCS works at Ellenbrook Christian College

- Students participate in community service activities
 either within the College or through approved external
 organisations, such as charities, schools, aged care
 facilities, and environmental initiatives.
- Service activities must be voluntary and unpaid, focusing on helping others and benefiting the community.

- Students log their hours and reflect on their experiences using a Community Service Logbook and Skills Journal.
- The program is overseen by the College's VET
 Support Officer, who ensures students meet program
 requirements and align their service with College's
 values.

Benefits to Students

Participating in ADCS offers students valuable personal and professional benefits, including:

- Earning WACE Credit Workplace learning contributes towards WACE achievement.
- Live Out Christian Values Serve others and practice kindness, generosity, and leadership.
- Develop Key Life Skills Enhance communication, teamwork, leadership, and problem-solving abilities.
- Make a Positive Impact Contribute to the wider community and support those in need.

Program Coordinator

Mrs Tanya Camacho tanya.camacho@ellenbrook.wa.edu.au

Endorsed Program

The Duke of Edinburgh's International Award

Program Description

The Duke of Edinburgh's Award (Duke of Ed) is an international youth program that provides young people with the opportunity to develop essential life skills, build confidence, and prepare for their future through a range of challenging and rewarding experiences. Whether through adventure, physical activity, skill development, or community service, participants engage in meaningful activities that foster personal growth and resilience. The Duke of Ed is part of an international network of over 140 countries and 8 million Awardees worldwide.

Open to students aged 14 to 24, the Duke of Ed is an inclusive framework that welcomes students regardless of their background, location, or personal circumstances.

This internationally recognised program is self-directed, allowing each student to tailor their journey based on their interests and aspirations. The Duke of Ed is not a competition, but rather a personal challenge that encourages young people to step beyond their comfort zones, set ambitious goals, and develop key skills for life and work. Upon completion, students feel a sense of achievement, personal fulfillment, and readiness for the future.

Three Progressive Levels: Bronze, Silver and Gold

Students may begin their journey at the Bronze level, progressing to Silver and ultimately Gold, where they dedicate increasing time and commitment to their chosen activities. Each level offers the flexibility to build upon existing interests or explore new experiences.







Core Components of the Duke of Ed Framework

- Voluntary Service Contributing to the community and making a meaningful impact.
- Physical Recreation Enhancing physical well-being through active participation in sports or fitness activities.
- **Skill Development** Cultivating a new talent or advancing an existing skill.
- Adventurous Journey Engaging in exploration and personal discovery through outdoor experiences.
- Gold Residential Project (Gold Level Only) Expanding horizons through an immersive residential experience in a
 new environment.

As students progress through the levels, they take on greater responsibilities and challenges, developing leadership, perseverance, and a commitment to lifelong learning. Regardless of how far they choose to go, each level offers invaluable experiences that contribute to personal and professional success.

WACE Contribution

The Duke of Ed in WA is an endorsed program with the School Curriculum and Standards Authority and Year 10, 11 and 12 students can count the following unit numbers towards the WA Certificate of Education (WACE).

- 1 Unit for Bronze
- 2 Units for Silver
- 4 Units for Gold

Tertiary Education Pathways

Edith Cowan University (ECU) have approved The Duke of Edinburgh's International Award as part of the portfolio of evidence that can be submitted with an application via the Experience Based Entry Scheme. This pathway includes access to most of the undergraduate courses at ECU. Find out more from ECU here.

For more information, please visit the Duke of Ed website: www.dukeofed.com.au

Program Coordinator

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