



Year 12
2024
Course Selection Guide

Learn - Achieve - Succeed

CONTENTS

Welcome letter from Principal	2
-------------------------------------	---

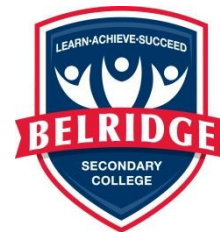
SECTION 1 – GENERAL INFORMATION

School Charges	3
WACE Requirements	4
Literacy and Numeracy Standard	5
Sequential Development.....	5
Choosing a Course.....	5
Ensuring Success	6
Recommended Minimum Entrance Requirements	6
Home/Study Commitments	6
Handing Homework in on time.....	6
Attendance Commitment.....	6
Medical Conditions Affecting School / Exam Performance.....	6
Withdrawing from Courses	6
Changing Courses	7
University Entrance Requirements	7
TAFE Admissions – Guide to Entry for full time courses	8
Belridge Study Pathways – ATAR or General	10

SECTION 2 – COURSE SELECTION DESCRIPTIONS

The Arts Learning Area	11
English Learning Area	20
Health & Physical Education Learning Area	22
Humanities and Social Sciences Learning Area	28
Mathematics Learning Area.....	34
Science Learning Area	39
Technologies Learning Area	
- Computing and Business Education	46
- Design & Technology	51
- Home Economics	57

Principal's Welcome



Welcome to the Belridge Secondary College Year 12 Selection Book for 2024.

At Belridge SC, our strong culture of respect for self, others and the environment ensures that our students are able to develop as learners in a safe, supportive environment. A clear focus, on “**Every student, Every classroom, Everyday**” ensures all students have access to a quality teaching and learning program that is tailored to meet their needs supporting them in the best possible way to reach their full potential and achieve success.

Our highly qualified and experienced staff provide a quality learning program for all students across our broad and diverse ATAR and General pathways. With the main goal of all students achieving the Western Australian Certificate of Education, the WACE, and a pathway to a successful future, careful consideration needs to be given to the selection of courses. The information in this handbook is designed to assist you to make the best choices in helping you plan your future pathway goals, whether that be to enter university, TAFE, further training or employment.

At Belridge SC there is a strong emphasis on academic achievement, our ATAR performance has enabled the College to offer a comprehensive suite of subjects designed to support direct university entry. Our General pathways can be supplemented with certificate courses, has seen strong success across all learning areas.

Our strong attainment rate has proven that our students, when in the right pathway, with the right support, can be successful and achieve their learning goals.

Course selection is an important time in a student's life and we encourage families to talk with their children about their future aspirations. The courses chosen by students in Year 11 will largely inform the selection for Year 12 courses. It is important that parents and students understand the impact of Year 11 results on the likelihood of students achieving their WACE.

Careers of the future are changing, some industries are showing rapid declines whilst others, especially in the STEM fields are showing significant growth. We recognise it can be a confusing time, therefore being informed as both a student and parent is key to making good choices. The website [JobOutlook](https://joboutlook.gov.au/) provides a wealth of information on future careers and can be used along with support from our staff as a guide <https://joboutlook.gov.au/>

Remember we are here to help and want to work with you as a partner preparing your child for the future.

Please ensure you are up to date with the latest requirements for achieving the WACE, which can be found on the following website <https://senior-secondary.scsa.wa.edu.au>

I look forward to working with our school community to ensure that every Belridge Secondary College student has a successful future ahead of them.

SHARON LYON
Principal
Belridge Secondary College

SCHOOL CHARGES

CONTRIBUTIONS AND CHARGES

***In Year 12, all course charges are compulsory. The school requires a 100% confirmation charge for high cost (\$100 or more) courses. Students will only be considered for enrolment in high cost courses after fees are paid in full at time of lodgement of course selection sheets.**

For most courses at the College there are text books to purchase as well as course charges. Text books are available from our chosen supplier. Booklists and course charges are sent to families after course selection is completed.

In addition to these compulsory charges there are also additional charges for:

- (a) optional activities in any course for which there is a cost associated with their provisions (e.g. excursions, camps, etc.)
- (b) other optional school-based activities which address broad learning outcomes and for which there is a cost (e.g. school and social events, such as the school ball).

Participation in options (b) is voluntary, but a compulsory charge is payable if the student opts to participate.

If you require assistance or advice on these charges, contact the Manager of Corporate Services.

SECONDARY ASSISTANCE SCHEME

Some financial assistance is available for charges and clothing. Most Centrelink, Family Health Care Card or Pensioner Concession cardholders are eligible.

Rules change from year to year.

If you think you are eligible, contact the college's Manager of Corporate Services.

Applications must be submitted during Term 1 of each school year.

TO ACHIEVE A WACE, STUDENTS MUST:



WACE requirements 2021 and beyond

1

General requirements

You must:

- demonstrate a minimum standard of literacy (reading and writing) and a minimum standard of numeracy
- complete a minimum of 20 units, or equivalents
- complete
 - at least four Year 12 ATAR courses OR
 - at least five Year 12 General courses and/or ATAR courses or equivalent OR
 - a Certificate II (or higher) VET qualification in combination with ATAR, General or Foundation courses.

2

Literacy and numeracy standard

For the WACE literacy and numeracy standard you may:

- pre-qualify through achieving Band 8 or higher in the reading, writing and numeracy tests of the Year 9 National Assessment Program – Literacy and Numeracy (NAPLAN), or;
- demonstrate the minimum standard of literacy and numeracy by successfully completing the relevant components of the Online Literacy and Numeracy Assessment (OLNA) in Year 10, 11 or 12.

3

Breadth and depth

You must complete a minimum of 20 units, which may include unit equivalents attained through VET and/or endorsed programs. This requirement must include at least:

- a minimum of ten Year 12 units, or the equivalent
- four units from an English course, post-Year 10, including at least one pair of Year 12 units from an English learning area course
- one pair of Year 12 units from each of List A (arts/languages/social sciences) and List B (mathematics/science/technology) subjects.

4

Achievement standard

You must achieve at least 14 C grades or higher (or equivalents) in Year 11 and Year 12 units, including at least six C grades (or equivalents) in Year 12 units.

5

Unit equivalents

Unit equivalents can be obtained through VET qualifications and/or endorsed programs. The maximum number of unit equivalents available through VET and endorsed programs is four Year 11 units and four Year 12 units with a maximum of four units with endorsed programs – two in Year 11 and two in Year 12.

NOTE

If students **do not** meet the literacy and numeracy standard by the time they exit secondary school, they can apply to the Authority to re-sit the assessment.

All students (whether they have achieved the WACE or not) will receive a Western Australian Statement of Student Achievement – a record of all courses and / or programs completed.

SEQUENTIAL DEVELOPMENT

- All ATAR and General courses demonstrate an increasing level of complexity from Year 11 to Year 12.
- Course units must be completed sequentially, with Year 11 units (1 & 2) being undertaken before Year 12 units (3 & 4) unless students enrol directly in Year 12 units without completing Year 11 units.
- Year 12 units (3 & 4) are paired. A course change date will be notified by SCSA and it will not be possible to switch after this date.
- If students switch courses in Year 12 (before the deadline), they will need to complete the assessment requirements of both units 3 & 4 of the new course.

CHOOSING A COURSE: ADVICE FOR STUDENTS

Choosing your courses

1. The majority of students will continue with the courses commenced in Year 11.
2. Remember, it is still your responsibility to check the course you select meets the minimum entrance requirements and/or pre-requisites for your intended tertiary study pathway.

For University Admissions: There may be some unacceptable course combinations for calculating ATAR. For further details, please refer to the **University Admission 2024 Requirements for School Leavers** which can be downloaded from www.tisc.edu.au

For 2024 University Admissions:

<http://www.tisc.edu.au/static/guide/university-admissions-index.tisc?cid=884534>

For Training WA (TAFE) Admissions: <http://tasonline.tafe.wa.edu.au/Reckoner/Default.aspx>

ENSURING SUCCESS

Recommended Minimum Entrance Requirements

The **Recommended Minimum Entrance Requirements** for each course unit are included in each of the course descriptions. These are stated to help students choose appropriate courses in which they should succeed – provided they work hard.

Homework/Study Commitments

Before students submit their selections, they need to consider the type of commitment they are able to give out of school hours. Students undertaking courses leading to an **ATAR (Australian Tertiary Admission Rank) need to do a minimum of three hours' study per course per week, each and every week**. That means if they are studying five such courses, they need to do a minimum of fifteen hours of homework and/or study per week.

Students undertaking **general or certificate courses need to do a minimum of 1.5 hours per course per week, each and every week**. That means that a typical six course load requires nine hours of homework and/or study per week.

Homework does not only consist of the work given to students by the teacher, but also of a self-directed component. This may include organising notes, revision, research, exam study, practical study or additional tasks or questions. One meeting period per week (Wednesday P5) is scheduled for senior students to meet regularly with senior school staff for guidance and review.

Handing in Work on Time

It is vital in Year 12 that all assessment work is handed in on time, for all courses. Failure to do so jeopardises grades.

See *Assessment Procedures*, on the school website under *SCHOOL EXPECTATIONS*.

Attendance Commitment

Your attendance and participation in class is the key to achievement of success. Studies show that students who attend school regularly are more likely to succeed at school. Aim for 100% attendance. The only acceptable reasons for absences are if you are sick or have a school activity such as an excursion. Work commitments and holidays are not acceptable reasons for being absent from school. If you are going to be absent, see your teachers before your absence to collect work, ensuring that you keep up with your coursework and study.

Medical Conditions Affecting School/Exam Performance

It is the responsibility of the student to notify the School of any medical condition that may affect performance as soon as they enrol or become aware of the condition. If special consideration is required in exams or class as a result of the medical condition, a medical certificate and/or other documentation must be provided to the Vice Principal (Senior School), so that arrangements can be put in place. This is a School Curriculum Standards Authority requirement.

Withdrawing from a Course to Have Independent Study Time

This option may be available to Year 12 students who are studying an ATAR program and is allocated on the basis of academic merit or when, in the opinion of School administration staff, it is seen to benefit a student's educational outcomes. As a guide, Year 12 ATAR students may withdraw from one course for study time at the start of Year 12, provided they have passed all six courses in Year 11 and have a sufficiently high ATAR score ≈ 75 . Students may also need to demonstrate a capacity to effectively use independent study time. This option is NOT available to students studying less than four ATAR Courses. Applications must be made to the Vice Principal (Senior School) and will be considered on an individual basis.

Changing Courses

When a student selects a program of study, he/she is committing to the courses for the duration of the course. Course changes are discouraged and can be avoided by:

- Choosing appropriate courses – note the **Minimum Entrance Requirements**
- Discussing any problems with your teacher and parents
- Working harder when the going gets tough; hand all work in on time, seek extra help and attend 100% of your classes.

If a student realises that he/she is not in an appropriate course (e.g. too difficult or too easy), it is recommended that the student arranges to meet with the School Administration Team / Senior School Vice Principal as soon as possible and, at the latest, prior to the end of Week 4, Term 1. Any student who changes a course after the commencement of the course must catch up on any work missed in the new course selected. Course changes may result in an increase in course fees.

University Entrance Requirements

In order to be considered for university admission via an ATAR score, a school leaver ATAR applicant should have:

- (a) met the **WACE** requirements as prescribed by SCSA.
- (b) achieved **competence in English** as prescribed by the individual universities, and
- (c) obtained a **sufficiently high ATAR** for entry to a particular university and/or course.

For some university courses there are additional special requirements such as prerequisite studies, interviews, portfolios, auditions, fitness requirements, etc.

For detailed information about university admission requirements, students and parents should refer to the appropriate *Admission Requirements for School Leavers* on the Tertiary Institution Service Centre (TISC) website www.tisc.edu.au

Students may also make contact directly with the universities for information on courses and admission requirements. University websites have specific sections for prospective students, parents and guardians. All universities have open days for prospective students, and students should attend these.

Note:

Students in Year 12 in 2024 should refer to the 2024 Admission Requirements for School Leavers.

Curtin University of Technology

<http://futurestudents.curtin.edu.au/>

Future Students Centre

Phone: (08) 9266 1000

Email: can be found via Curtin's website

Contact Us Page

Edith Cowan University

<http://www.ecu.edu.au/future-students/overview>

Student Recruitment

Phone: (08) 6304 6304

Email: futurestudy@ecu.edu.au

Murdoch University

<http://www.murdoch.edu.au/Future-students/>

Prospective Students and Admissions Centre

Phone: 1300 Murdoch (687 3624)

Email: study@murdoch.edu.au

The University of Western Australia

<http://www.studyat.uwa.edu.au/>

UWA Admissions Centre

Phone: (08) 6488 6000

Email: general-enquiries@uwa.edu.au

The University of Notre Dame (Private)

www.nd.edu.au

Phone: (08) 9433 0555

Email: enquiries@nd.edu.au

TAFE Admissions

Guide for entry to full time courses



Entry to non-competitive courses

Applicants for non-competitive courses need to demonstrate minimum literacy and numeracy skills or AQF qualification levels.

Step 1:

Demonstrate literacy and numeracy skills or AQF qualification level

Requirements from ONE of the columns below need to be met. For example, a school leaver can apply by providing evidence against either the requirements in the **'School leaver'** column or in the **'AQF'** column.

	School leaver	Non-school leaver	AQF**
Certificate I	Nil	Nil	Nil
Certificate II	OLNA* or NAPLAN 9 Band 8	C Grades in year 10 English and Maths or equivalent	Certificate I or Certificate II
Certificate III	OLNA* or NAPLAN 9 Band 8	C Grades in year 10 English and Maths or equivalent	Certificate I or Certificate II
Certificate IV	C Grades in year 11 WACE General English, and OLNA* or NAPLAN 9 Band 8	C Grades in year 11 English and Maths or equivalent	Certificate II or Certificate III
Diploma or Advanced Diploma	Completion of WACE General or ATAR (minimum C Grades) or equivalent	Completion of WACE General or ATAR or equivalent (minimum C Grades)	Certificate III

Step 2:

Provide evidence against the selection criteria for courses with competitive entry

Applicants who can demonstrate minimum literacy and numeracy skills will be assessed and ranked against the following selection criteria. Offers will be made to applicants with the highest total point scores.

Selection criteria – maximum 90 points	
Academic achievement – maximum 60 points	Work history – maximum 30 points
Derived from the highest points from either: <ul style="list-style-type: none"> secondary education results; or completed AQF qualification. An overview of the points used to calculate a score for academic achievement is provided in attachment A.	Credit for total hours worked at 0.003 points per hour: <ul style="list-style-type: none"> employment work experience community services/volunteer work

Selection criteria:

Academic achievement (maximum 60 points)

Academic achievement can be demonstrated through secondary education results or a completed AQF qualification. If documents for both secondary education and completed AQF qualifications are provided, points will be calculated for both and the higher points used to calculate the score for academic achievement.

If more than one AQF qualification has been completed, the one which awards the highest points score will be used.

Points awarded for secondary education results Western Australian secondary education

The score will be generated from the three completed full-year courses that award the highest points.

Year	WACE course level	C grade	B grade	A grade
Year 10		6	8	10
Year 11 or 12	Foundation	6	8	10
Year 11	General	11	12.5	14
Year 11	ATAR	14	16	18
Year 12	General	14	15	16
Year 12	ATAR	18	20	20

Points awarded for completed AQF qualifications

Completed AQF qualifications Points are awarded for completed nationally recognised qualifications.

		Course applying for					
		Certificate I	Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Course completed	Pathway course	60	60	60	60	60	60
	Degree and above	60	60	60	60	60	60
	Advanced diploma	60	60	60	60	60	60
	Diploma	60	60	60	60	60	60
	Certificate IV	60	60	60	60	50	50
	Certificate III	60	45	45	45	30	30
	Certificate II	60	30	30	25	20	20
	Certificate I	60	20	20	15	10	10

WHAT DOES THIS MEAN FOR STUDENTS SELECTING THEIR LEARNING PROGRAM FOR YEAR 12?

Belridge Secondary College offers two **distinct pathways** for senior students:

ATAR - Academic Pathway

For students aspiring to direct entry to university via an ATAR score.

Students **must select a minimum of four ATAR level Year 12 courses**.

These courses are identified by the first two letters of the course code, as follows:

A ATAR

T Twelve e.g. **ATENG**

It is advisable to select five ATAR level courses to maximise ATAR.

General Pathway

Students should select a broad range of courses and experiences for which they have satisfied the recommended minimum entrance requirements. A student wanting to be prepared for the broadest range of **TRAINING WA** courses, in addition to an English course, and at least one List B course, would typically include in their program of study a combination of General, Certificate or ATAR courses in their area of interest and future career aspirations.

The VET qualifications listed are proposed offerings for the 2023 academic year. At the time of publication, no agreements have been entered into with a Registered Training Organisation (RTO) for the delivery of these qualifications. On the basis of interest from students, the college will initiate a formal partnership agreement with an RTO for the delivery of these qualifications.

Workplace Learning is also available to General pathway students.

Participating in all classes and learning experiences and submitting all work on time are the most important strategies for ensuring success.

THE ARTS LEARNING AREA

Year 12 2024 Pathways

Course Name	General
Dance	GTDAN
Drama	GTDRA
Design: Photography	GTDESP
Visual Art	GTVAR
Materials Design & Technology – Textiles (Fashion Design)	GTMDTT
Music (General)	GTMUS

GENERAL DANCE – YEAR 12

Course Code: GTDAN

General Pathway

Cost \$80

Plus, additional cost of excursion approximately \$50

Course Outline:

The Dance General course develops and presents ideas through a variety of genres and styles as it provides a unique way to express our view on Popular Culture and Australian Dance.

Students develop their creative thinking in individual and group work by manipulating existing movement and producing new ideas. By using a wide range of creative processes, such as improvisation and the use of choreographic elements and/or devices students create their own works.

Within the focus of dance, students will analyse, evaluate and interpret professional dance works from leading national dance companies.

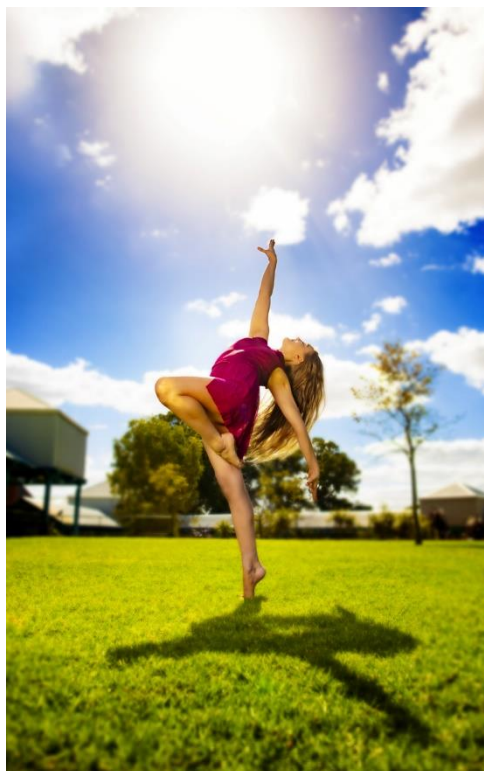
** Examples of genres that may be studied in this course include, but are not limited to: contemporary, ballet, jazz, hip-hop.*

N.B Students are required to perform at an end of year showcase.

These units include a compulsory written Externally Set Task.

Minimum Entrance Requirements:

Students need to receive an A, B or C in GEDAN.



GENERAL DRAMA – YEAR 12

Course Code: GTDRA

General Pathway

Cost \$80 – plus monies will be payable in addition for excursions to drama performances.

Course Outline:

The Drama General course focuses on aesthetic understanding and 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, play building, text interpretation, playwriting and dramaturgy which allow them to create original drama and interpret a range of texts written or devised by others.

Their work in this course includes production and design aspects involving sets, costumes, makeup, props, promotional materials, stage management, front of house activities, and 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.

These units include a compulsory internal examination.

Minimum Entrance Requirements:

A 'C' grade or better in GEDRA

GENERAL DESIGN: PHOTOGRAPHY – YEAR 12

Course Code: GTDESP

General Pathway

Cost \$120*

****Full payment must be made upfront in order to enrol in this course***



Course Outline:

Design involves the strategic development, planning and production of visual and tactile communication. It deals with the effective and efficient communication of ideas, values, beliefs, attitudes, messages and information to specific audiences for specific purposes and with specific intentions.

Design has its own set of theories and practices and incorporates a wide range of principles, methods and techniques drawn from a variety of different disciplines such as: psychology, communication studies, digital design, technical graphics, art, engineering, architecture, sociology, cultural studies, marketing and economics. The disciplined application of these elements forms a design process that guides the development of creative and functionally effective solutions to identified possibilities or problems.

We live in a diverse and constantly changing information-rich society and culture, constantly immersed in design communication. Sometimes the intention of design is to inform, express, educate or entertain. Often the intention is also to influence or persuade. An understanding of design and how it works can enhance an individual's ability to interact with their environment, to learn from it and to grow within it. It also empowers the individual by making them more discerning of, and therefore less susceptible to, manipulation and influence via design.

The goals of the Design General course are to facilitate a deeper understanding of how design works; and how ideas, beliefs, values, attitudes, messages and information are effectively communicated to specific audiences with specific intentions or purposes via visual media forms. This course aims to achieve these goals by exposing students to a variety of communication forms and a thorough exploration of design.

Design projects allow students to demonstrate their skills, techniques and application of design principles and processes; to analyse problems and possibilities; and to devise innovative strategies within design contexts. There is potential for students to develop transferable skills and vocational competencies while devising innovative designs.

In this course, students develop a competitive edge for current and future industry and employment markets. This course also emphasises the scope of design in professional and trade based industries allowing students to maximise vocational and/or university pathways.

Unit 3 – Product Design

- Students explore Graphic Design and Photography techniques working through the design process to format creative ideas that relate to product design.
- Students learn that the commercial world is comprised of companies, requiring consumer products, services and brands for a particular audience.

continued ...

- Some areas of study may include: Photography: record cover design; magazine design; fashion photography; design of a billboard image; still life photography; advertising photography; product advertisements; product catalogue; landscape photography; food photography/styling.

Unit 4 – Cultural Design

- Students explore Graphic Design and Photography techniques working through the design process to format creative ideas that relate to product design.
- Students learn that society is made up of different groups of people who share diverse values, attitudes, beliefs, behaviours and needs; and that different forms of visual communication transmit these values and beliefs.
- Some areas of study may include - Photography: formal portrait photography; social/cultural documentary; community/social photographic studies; Fashion campaign poster; Billboard Design, self-image; montage photography; documentary photography. Advert design Photography.

Minimum Entrance Requirements:

An enthusiasm for photography and graphic design. Experience in photography in lower school is preferred, but not essential.

Pre-requisites:

GEDES is recommended, but not essential.

Further study:

Leads to further study in photography and graphic design at TAFE.

Required:

8-16 GB USB and 16GB San Disc Card.

GENERAL VISUAL ART – YEAR 12

Course Codes: GTVAR

General Pathway

Cost \$100 plus excursion (approximately \$25)



Course Outline:

Unit 3 - Inspirations

The focus for this unit is **inspirations**. Students become aware that artists gain inspiration and generate ideas from diverse sources, including what is experienced, learned about, believed in, valued, imagined or invented. The breadth of this focus allows choice of learning contexts that are related to students' interests.

In this unit, students develop their knowledge and understanding of visual language and apply this to both art making and art interpretation. Through exploration, investigation and experimentation, they develop skills in inquiry, recording observations and manipulating media to create artworks in selected art forms.

Students, through research and/or first-hand experience of artworks and art making, actively engage in perception, research, reflection and response and consider the ways in which artists, past and present, have been inspired to develop artworks. They are given opportunities to present or exhibit their work, to describe their source(s) of inspiration and to evaluate the process and success of their finished artworks.

Unit 4 - Investigations

The focus for this unit is **investigations**. Students explore and develop ideas through the investigation of different artists, art forms, processes and technologies. Students investigate spontaneous and analytical styles of drawing, experimenting with a range of media and techniques. They further develop their knowledge and understanding of visual language and apply this to both art making and art interpretation.

In particular, students explore the expressive potential of media techniques and processes, considering their inherent qualities in the development and presentation of their artworks. They investigate ways to document their thinking and working practices, refining their reflection and decision-making skills.

In this unit, students investigate a variety of artworks and media to further develop their understanding of the creative process and learn how to apply new analytical and production skills and techniques in the communication of their own ideas.

The course will be 65% Practical, 35% Written

These units include a compulsory externally set task.

Pre-requisites:

A 'C' grade or better in Year 11 Visual Arts. (GEVAR)

Further Study:

TAFE Visual and Creative Arts Certificate courses.



GTMDTT – Materials Design and Technology - Textiles Fashion and Design (General)

General Pathway

Cost \$150* per year

*** Full payment must be made upfront in order to enrol in this course**

Plus, extra costs may be incurred by the student should they choose to use exotic fabrics and embellishments such as silk, brocade and crystal beads.

The Materials Design and Technology General course is a practical course. The course allows the exploration and use of textile materials with the design and manufacture of products as the major focus. There is also the flexibility to incorporate additional materials from outside the designated context of textiles. This will enhance and complement the knowledge and skills developed within the course as many modern-day products are manufactured using a range of different material types. Students examine social and cultural values and the short-term and long-term impacts of the use and misuse of materials and associated technologies. Through this inquiry, experimentation and research, students develop their creativity and understanding of the society in which they live.

Working with fibre and fabrics, students develop a range of manipulation, processing, manufacturing and organisational skills. When designing with materials, they develop cognitive skills, such as solving problems, generating ideas, creative design strategies and communicating what they do. This makes them more technologically literate and, as consumers, enables them to make more informed decisions about the use and misuse of technology.

The Materials Design and Technology General course aims to prepare all students for a future in a technological and material world by providing the foundation for lifelong learning about how products are designed and how materials are developed and used.

Unit 1

Students are introduced to the fundamentals of design. They learn to communicate various aspects of the technology process by constructing what they design.

Throughout the process, students learn about the origins, classifications, properties and suitability for purpose of the materials they are using, and are introduced to a range of production equipment and techniques. They develop materials manipulation skills and production management strategies, and are given the opportunity to realise their design ideas through the production of their design project.



Unit 2

Students interact with products designed 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.

Throughout the process, students learn about the origins, classifications, properties and suitability for end use of materials they are working with. Students are introduced to a range of technology skills and are encouraged to generate ideas and realise them through the production of their design projects. They work within a defined environment and learn to use a variety of relevant technologies safely and effectively.

Students, in consultation with teachers, select projects of interest and then design and make products suitable for a specific market.

Some areas of study may include: Elements and principles of design; colour analysis in fashion; fashion illustration; fibre classification; construction techniques; pattern layout; stitching techniques; fabric manipulation.

Minimum Entrance Requirements: A passion for fashion is necessary and completion of Year 11 Materials Design and Technology Textiles. Students need to have a genuine interest in designing and have achieved a C grade in both Year 10 English and Arts related courses.

Pre requisites: None



GTMUS Music (General)

Course Codes: GTMUS

General Pathway

Cost \$80 plus excursion (approximately \$20)

Course Outline:

The General Music course encourages students to explore a range of musical experiences, both individually and collaboratively, to develop their musical skills, understanding and creative potential. Students will engage in a written component that incorporates aural, theory, composing and analysis, in addition to a practical component where students can choose to perform on an instrument/voice, submit a composition portfolio, or complete a production/practical project. The Music General course provides opportunities for creative expression and the development of aesthetic appreciation, understanding and respect for music and music practices across different times, places, cultures and contexts.

Pre-requisites:

A 'C' grade or better in Year 11 Music (GEMUS).

The General Music Course is broken down into four components as follows:

Aural and Theory:

Students develop their understanding of musical symbols, terms and concepts including the ability to recognise and apply them in written and aural contexts. Examples of topics covered include scales, chord progressions, genre specific form recognition and expressive writing.

Composing and Arranging:

Students compose original works and creatively arrange existing pieces in a range of contexts using both traditional notation and ICT. Students use the knowledge they have developed in the Theory and Aural aspects to tightly control the sound of the end product.

Investigation and Analysis:

Students develop their active listening skills to identify and appreciate the use and effect of musical elements within a piece. Students also research and discuss the roles of influential artists, social, economic, technological and historical factors on the development of different styles.

Practical:

Students develop their technical and performance skills on their instruments or their compositional skills through a portfolio of work or production. In either context student use their skills and knowledge to control the stylistic and expressive elements of their work.

ENGLISH LEARNING AREA

Year 12 2024 Pathways

Course Name	General	ATAR
English	GTENG	ATENG

Upper School Course

In the English course, students learn about the English language: how it works and how to use it effectively.

Language plays a central role in human life: It provides a vehicle for communication, a tool for thinking, a means of creativity and a source of pleasure.

Through language, humans shape understanding of themselves and their world. An understanding of a language and the ability to use it effectively empowers students. It gives them access to knowledge, enables them to play an active part in society and contributes to their personal growth.

Students will begin their upper school course in English at a unit level appropriate to their performance.

GENERAL ENGLISH – YEAR 12

Course Code: GTENG

General Pathway

Cost \$90

Textbooks are provided

Course Outline:

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 English General course is designed to provide students with the skills that will empower them to succeed in a wide range of post-secondary pathways.

The course develops students' language, literacy and literary skills to enable them to communicate successfully both orally and in writing and to enjoy and value using language for both imaginative and practical purposes.

Minimum Entry Requirements:

Completion of GEENG

Additional Requirements:

None

Students taking GTENG pathway will not be expected to sit formal exams, but must sit an Externally Set Task as part of their assessment.

ATAR ENGLISH – YEAR 12

Course Code: ATENG

University Pathway

Cost \$90

Textbooks are provided, however, students are encouraged to purchase their own copies for annotation purposes. In addition, students will need to pay an extra \$40 pending approval for a compulsory excursion throughout the year.

Course Outline:

The English ATAR course focuses on developing students' analytical, creative, and critical thinking and communication skills in all language modes. It encourages students to critically engage with texts from their contemporary world, with texts from the past and with texts from Australian and other cultures. Such engagement helps students develop a sense of themselves, their world and their place in it.

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 enjoy creating their own imaginative, interpretive, persuasive and analytical responses. The English ATAR course is designed to develop students' facility with all types of texts and language modes and to foster an appreciation of the value of English for lifelong learning.

Students taking the ATENG pathway will sit formal exams, and a mandatory external WACE exam.

Minimum Entry Requirements: C grade or better in AEENG

Further Study: University and TAFE courses

Additional Requirements Time:

Students are expected to devote sufficient time to the study of English to achieve good results.

HEALTH & PHYSICAL EDUCATION LEARNING AREA

Year 12 2024 Pathways

Course Name	General	ATAR
Cricket Studies and Netball Studies	SIS30115 Certificate III in Sport & Recreation	
Health Studies	GTHEA	ATHEA
Outdoor Education	GTOED	
Physical Ed Studies	GTPES	ATPES

Health & Physical Education Studies contribute to the development of a student's physical, social and emotional growth. Students learn to develop self-management, interpersonal and physical activity skills. Outdoor Education, by encouraging empowered interaction with the natural world, aims to develop an understanding of our relationships with the environment, others and ourselves.

All general courses are offered in a two-year rotation

CRICKET STUDIES – YEAR 12

SIS30115 - CERTIFICATE III IN SPORT & RECREATION

Course Code: C3CRI

General Pathway

Cost: \$350*

****Full payment must be made upfront in order to enrol in this course***

(This is a high cost two-year qualification delivered over Years 11 and 12)

Course Outline:

The focus of the cricket program in Years 11 & 12 is to prepare the students for career options within the sport industry. This qualification also provides for multi skilled roles which combine a range of activities required to support the operation of facilities such as fitness centres, outdoor sporting grounds or complexes, aquatic centres and community recreation centres. In order to achieve the full qualification students will need to remain enrolled for two years. Advanced cricket skills and games will still be part of the upper school program as well as an international cricket tour opportunity.

Minimum Entry Requirements:

Pre-requisites: Enrolled in the Cricket Program in Year 11 (continuing enrolment)

Further Study:

University and/or TAFE courses

Packaging Rules:

15 units must be completed

9 core units **plus**

6 elective units

For details of core and elective units go to <https://training.gov.au/Training/Details/sis30115>

NETBALL ACADEMY – YEAR 12

SIS30115 - CERTIFICATE III IN SPORT & RECREATION

Course Code: C3NET

General Pathway

Cost: \$250*

****Full payment must be made upfront in order to enrol in this course***

Course Outline:

This is a two-year qualification delivered over Years 11 and 12. Payment must be made upfront in order to enrol in this course.

The focus of the Netball Academy in Years 11 & 12 is to prepare the students for career options within the sport industry. This qualification requires students to gain competence in a number of units relating to the sport and recreation industry. Some of these units are in the areas of coaching, injury prevention, first aid, communication and equipment management. In order to achieve the full qualification students will need to remain enrolled for the two years. The course will have a Netball focus and skills and games will still be a major part of the senior school program.

Students will also be given the opportunity to go on an international tour in either Year 11 or 12.

continued ...

Minimum Entry Requirements:

Pre-requisites: Enrolled in the Netball Program in Year 11 (continuing enrolment)

Further Study:

University and/or TAFE courses

Packaging Rules

15 units must be completed

9 core units **plus**

6 elective units

For details of core and elective units go to <https://training.gov.au/Training/Details/sis30115>

ATAR HEALTH STUDIES – YEAR 12

Course Code: ATHEA

University Pathway

Cost: \$50

Course Outline:

The Health Studies ATAR course focuses on the study of health as a dynamic quality of human life. Students undertaking this course develop the knowledge, understanding and skills necessary to promote an understanding of the importance of personal and community action in promoting health.

The first unit focuses on the health of specific populations and reasons why some groups do not enjoy the same level of health as the general population. Students learn about factors creating these disparities and ways of improving the health and wellbeing of specific groups. Students apply inquiry skills to examine and interpret data, and explain and respond to inequities in health.

The second unit focuses on local, regional and global challenges to health. Students learn about the impact of determinants on global health inequities and explore approaches to address barriers preventing groups from experiencing better health. Students apply well-developed health inquiry skills to analyse health issues, develop arguments and draw evidence-based conclusions.

This course will prepare students for career and employment pathways in a range of health and community service industries. Students will have the opportunity to develop key employability and life skills, including communication, leadership, initiative and enterprise.

Minimum Entry Requirements:

C Grade or better in AEHEA

Further Study:

University and/or TAFE courses

GENERAL HEALTH STUDIES – YEAR 12

Course Code: GTHEA

General Pathway

Cost: \$70 (to include cost of Health workbook \$19)

Course Outline:

The Health Studies General course focuses on the study of health as a dynamic quality of human life. Students undertaking this course develop the knowledge, understanding and skills necessary to promote an understanding of the importance of personal and community action in promoting health.

The first unit focuses on building students' knowledge and understandings of health determinants and their interaction and contribution to personal and community health. Students define and consolidate understandings of health promotion and are introduced to key health literacy skills. Students expand on their understanding of the impact of beliefs on health behaviour and continue to develop personal and interpersonal skills which support health. Inquiry skills are consolidated and applied, including the ability to identify trends and patterns in data.

The second unit focuses on the impact of health determinants on personal and community health. The concept of community development and the importance of participation and empowerment is introduced. Students learn about Australia's National Health Priority Areas (NHPAs) and preventive strategies to reduce risk and contribute to better health. The use of social marketing in health is explored and students are introduced to emotional intelligence as a mechanism for perceiving, controlling and evaluating emotions. Students continue to refine inquiry skills as they address relevant issues and produce insightful and well-researched reports.

This course will prepare students for career and employment pathways in a range of health and community service industries. Students will have the opportunity to develop key employability and life skills, including communication, leadership, initiative and enterprise. Inquiry skills will equip students to adapt to current and future studies and work environments.

Minimum Entry Requirements:

None

Further Study:

TAFE courses

GENERAL OUTDOOR EDUCATION – YEAR 12

Course Code: GTOED

General Pathway

Cost: \$250*

****Full payment must be made upfront in order to enrol in this course***

Course Outline:

Through interaction with the natural world, Outdoor Education aims to develop an understanding of our relationships with the environment, others and ourselves.

The Outdoor Education General course focuses on outdoor activities in a range of environments, including bushwalking, snorkelling, canoeing, climbing and orienteering. It provides students with an opportunity to develop a comprehensive understanding of the environment and develop a position relationship with nature.

The course lends itself to an integrated approach between practical experiences, the environment and conceptual understandings. Students develop self-awareness by engaging in a range of

continued ...

challenging outdoor activities. They enhance personal and group skills and build confidence, empathy and self-understanding. Working with others enables students to better understand group dynamics, and enhance their leadership qualities and decision-making abilities, while showing respect for self, others and the environment.

The course also provides students with opportunities to develop skills that will enable them to pursue interests and careers in outdoor pursuits, environmental management, or eco-tourism.

The students are expected to attend an excursion and an extended camp.

Minimum entry requirements:

Confident swimmer, tread water and swim 200m. Able to attend camps and lessons. that run before school.

A 'C' grade or better in Year 11 General Outdoor Education.

Further study:

TAFE courses

ATAR PHYSICAL EDUCATION STUDIES – YEAR 12

Course Code: ATPES

University Pathway

Cost: \$150* (to include use of laboratory facilities at ECU and transport)

***Full payment must be made upfront in order to enrol in this course**

Course Outline:

Study of the Physical Education Studies ATAR course contributes to the development of the whole person. It promotes the physical, social and emotional growth of students. Throughout the course, emphasis is placed on understanding and improving performance in physical activities. The integration of theory and practice is central to studies in this course.

The Physical Education Studies ATAR course focuses on the complex inter-relationships between motor learning and psychological, biomechanical and physiological factors that influence individual and team performance. Students engage as performers, leaders, coaches, analysts and planners of physical activity. Physical activity serves both as a source of content and data and as a medium for learning. Learning in the Physical Education Studies ATAR course cannot be separated from active participation in physical activities, and involves students in closely integrated written, oral and physical learning experiences, based upon the study of selected physical activities.

The course appeals to students with varying backgrounds, physical activity knowledge and dispositions. Students analyse the performance of themselves and others, apply theoretical principles and plan programs to enhance performance. Physical activity and sport are used to develop skills and performance along with an understanding of physiological, anatomical, psychological, biomechanical and skill learning applications.

The course prepares students for a variety of post-school pathways, including immediate employment or tertiary studies. It provides students with an increasingly diverse range of employment opportunities in the sport, leisure and recreation industries, education, sport development, youth work, and health and medical fields linked to physical activity and sport. The course also equips students to take on volunteer and leadership roles in community activities.

Minimum Entry Requirements:

C grade or better in Year 11 Physical Education Studies ATAR (AEPES) and English ATAR (AEENG).

Further Study:

University and/or TAFE courses

GENERAL PHYSICAL EDUCATION STUDIES – YEAR 12

Course Code: GTPES

General Pathway

Cost: \$95

Course Outline:

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 in the Physical Education Studies General course cannot be separated from active participation in physical activities and involves students in closely integrated written, oral and physical learning experiences based upon the study of selected physical activities. The course appeals to students, with varying backgrounds, physical activity knowledge and dispositions. Students analyse the performance of themselves and others, apply theoretical principles and plan programs to enhance performance. Physical activity and sport are used to develop skills and performance, along with an understanding of physiological, anatomical, psychological, biomechanical and skill learning applications.

This course provides students with an increasingly diverse range of employment opportunities in the sport, leisure and recreation industries, education, sport development, youth work and health and medical fields linked to physical activity and sport. The course also equips students to take on volunteer and leadership roles in community activities.

Minimum Entry Requirements:

C grade in Physical Education.

Further Study:

TAFE courses

HUMANITIES & SOCIAL SCIENCES LEARNING AREA

Year 12 2024 Pathways

Course Name	General	ATAR
Geography	GTGEO	ATGEO
Modern History		ATHIM
Ancient History	GTHIA	
General Psychology	GTPSY	
Career And Enterprise	GTCAE	
Workplace Learning	ADWPL WORKPLACE LEARNING *can be selected as a 7th course	

*All general students are encouraged to enrol in ADWPL. A minimum of one 55 hours work placement can be completed in Year 12. Work placements occur during scheduled exam breaks.

ATAR GEOGRAPHY – YEAR 12

Course Code: ATGEO

University Pathway

Cost: \$50 for supplementary texts, maps and photocopying

\$60 (approximately) for textbook

\$10 (per year) for excursions if required

Course Outline:

The Geography ATAR course provides a structured, disciplinary framework to investigate and analyse a range of challenges and associated opportunities facing Australia and the global community. These challenges include rapid change in biophysical environments, the sustainability of places, dealing with environmental risks, and the consequences of international integration. This Course also includes a full day fieldtrip to the Perth CBD in Semester 2.

Semester 1: This unit focuses on the changing biophysical cover of the Earth's surface, the creation of anthropogenic biomes and the resulting impacts on either global climate or biodiversity. Through applying the concept of sustainability, students are given the opportunity to examine and evaluate a program designed to address the negative effect of land cover change. Aspects of physical, environmental and human geography provide students with an integrated and comprehensive understanding of the processes related to land cover change, their local, regional and global environmental consequences, and possible sustainable solutions.

Semester 2: This unit identifies the challenges of designing urban places to render them more productive, vibrant and sustainable. Urban planning involves a range of stakeholders who contribute to decision making and the planning process. Students examine how governments, planners, communities, interest groups and individuals attempt to address these challenges in order to ensure that places are sustainable. They also investigate the ways in which geographical knowledge and skills can be applied to identify and address these challenges. The present and future needs of society are addressed by the allocation and reallocation of land uses, improving infrastructure and transport systems and enhancing amenities to meet the needs of the population as perceived by the different perspectives of the various stakeholders.

Minimum Entrance Requirements: C grade or better in AEENG and/or AEGEO

Further Study: University arts and science courses

GENERAL GEOGRAPHY

Course Code: GTGEO

General Pathway

Cost: \$50

Course Outline

Unit 3

In this unit, students explore the management of hazards and the risks they pose to people and environments. Risk management is defined in terms of preparedness, mitigation and/or prevention. Prevention is concerned with the long term aspects of hazards and focuses on avoiding the risks associated with their reoccurrence. Mitigation is about reducing or eliminating the impact if the hazard does happen. Preparedness refers to actions carried out prior to the advance notice of a hazard to create and maintain the capacity of communities to respond to, and recover from, natural disasters.

The hazards studied are Bushfires and Ebola. This includes local fieldwork to witness first-hand the environmental and cultural impacts of bushfires (recent areas have included Yanchep National Park and the Perth Hills).

continued ...

Unit 4

This unit focuses on the process of international integration (globalisation) and is based on the reality that we live in an increasingly interconnected world. It provides students with an understanding of the economic and cultural transformations taking place in the world today, the spatial outcomes of these processes, and their political and social consequences.

Students have the opportunity to explore the ideas developed in the unit through an investigation of the changes taking place in the spatial distribution of the production and consumption of a selected commodity, good or service and the study of an example of cultural diffusion, adoption and adaptation. They also investigate the ways people embrace, adapt to, or resist the forces of international integration.

The selected commodity is the Automobile, focusing on global brands such as Toyota and Volkswagen. The example of cultural diffusion is music festivals (Coachella, Download, Summerfest, and also Splendour in the grass for some Australian content)

ATAR MODERN HISTORY – YEAR 12

Course Code: ATHIM

University Pathway

Cost: \$50 for supplementary texts and photocopying
\$60 (approximately) for textbook

Course Outline:

Semester 1: The focus of this unit is **modern nations in the 20th century**; the crises that confronted nations, their responses to these crises and the different paths nations have taken to fulfil their goals. Students investigate crises that challenged the stability of government, the path of development that was taken and the social, economic and political order that was either established or maintained. Students examine the ways in which the nation dealt with internal divisions and external threats. They emerge with a deeper understanding of the character of a modern nation. The key conceptual understandings covered in this unit are the reliability and usefulness of evidence; cause and effect; continuity and change; significance; empathy; contestability; and changing representations and interpretations.

The context studied is **Russia and the Soviet Union 1914–1945**.

Semester 2: The focus of this unit is the **modern world since 1945** and builds students' understanding of the contemporary world. This includes changes to the nature of the world order: shifting international tensions, alliances and power blocs; the emergence of Asia as a significant international political and economic force, and the nature of engagement by and with Australia; the nature of various conflicts and regional and international attempts to create peace and security. As part of their study, students should follow and make relevant connections with contemporary events. The key conceptual understandings covered in this unit are: causation; continuity and change; historical significance and changing perspectives and interpretations of the past; and contestability.

The context studied in is **Australia's engagement with Asia**.

Minimum Entrance Requirements:

C grade or better in AEENG and AEHIM

Further Study:

University Arts courses

GENERAL ANCIENT HISTORY – YEAR 12

Course Code: GTHIA

Cost: \$50

Course Outline:

Units 3 and 4

Students examine a range of ancient historical narratives to develop understandings about the chronology of a time period. They examine the defining characteristics of a society at the start of the period; the key people, ideas and events that were forces for continuity and change during the period; and the effects of continuity and change on a society and/or upon other societies. Through this study, they develop a growing awareness that ancient historical narratives are set within a defined period of time, reflect a particular view of history which may be similar to, or different from, other ancient historical narratives, and that the narratives are supported with evidence.

Topics that are covered: Ancient Rome: The Late Republic 133-66 BC.

Minimum Entrance Requirements:

None, but it is helpful if students have completed and attained a C grade in Year 11 Ancient History course and have attained a minimum C grade for Year 11 English.

GENERAL PSYCHOLOGY – YEAR 12

Course Code: GTPSY

Cost: \$50

\$50 (approximately) for textbooks

Course Outline:

Unit 3

This unit expands on personality theories studied in Unit 1 by introducing students to important theorists including Bandura, Pavlov and Skinner. Students apply knowledge and understandings to explore how personality can shape motivation and performance. An analysis of the use of personality testing by organisations is undertaken. Students are introduced to different states of consciousness and the role of sensation, perception and attention in organising and interpreting information. Factors which determine friendships and conflict resolution are explored. Students expand on their knowledge of ethics in psychological research by examining the role of deception in experiments. Key terminology, such as sample and populations, are defined and an understanding of experimental and control groups is acquired.

Unit 4

In this unit, the functions of the four lobes of the cerebral cortex are examined. Brain scanning techniques and relevant case studies are used to illustrate the link between the brain and behaviour. In developmental psychology, students learn about Piaget's theory of cognitive development and Kohlberg's theory of moral development. Group behaviours, including conformity, group polarisation and the bystander effect, are studied. The causes of prejudice and ways of reducing prejudice are explored. Students continue to develop and apply their understanding of psychological research and data collection method.

Minimum Entrance Requirements:

None, but it is helpful if students have completed and attained a C grade in Year 11 General Psychology course and have attained a minimum C grade for Year 11 English.

Further Study:

Studying at a TAFE / University level.

GENERAL CAREER AND ENTERPRISE

Course Code: GTCAE

General Pathway

Cost: \$50

Course Outline:

The Career and Enterprise General course engages students in learning about developing their career in a constantly changing digital and globalised world. Careers are now considered to be about work, learning and life. Individuals need to be proactive, enterprising career managers who engage in lifelong learning.

The **Semester 1 Unit** is about adopting a proactive approach to securing and maintaining work and it involves self-management, using work search tools and techniques, developing career competencies and accessing learning opportunities.

The **Semester 2 Unit** explores issues associated with career management, workplaces and influences and trends in times of change. Change can be analysed and the information used to inform strategies associated with self-management, career building and personal and professional learning experiences.

Students are given the time and resources to, enhance their career aspirations and prospects beyond their secondary school years by:

- Linking their skills, abilities, interests and experiences to types of work and employment industries.
- Investigating work, tertiary education, training and self-employment opportunities.
- Developing an individual career pathway plan.
- Investigating and reporting on the significance of workplace change and trends, such as increased automation and the necessity for gaining tertiary qualifications.
- Reflecting on the significance of professional and personal skill development, as well as the importance of paid and unpaid work to individual career development.
- Investigating and reporting on the importance of safety in the workplace.
- Investigating and reporting on the significance of contemporary workplace issues, such as bullying and catering for diversity.
- Creation of an electronic portfolio that can be utilised to apply for employment and tertiary education positions.
- Attending the Careers Expo which offers students exposure to experts and resources in a wide range of industries.

Minimum Entrance Requirements:

None required, however it is recommended that students have attained a minimum Year 11 'C' grade for English and HASS.

AUTHORITY DEVELOPED WORKPLACE LEARNING – YEAR 12 (ENDORSED PROGRAM)

Course Code: ADWPL

General Pathway

Cost: \$30

Course Outline:

Workplace Learning is an Authority-developed endorsed program that is managed by individual schools.

To complete this endorsed program, a student works in one or more real workplace/s to develop a set of transferable workplace skills. The student must record the number of hours completed and the tasks undertaken in the workplace in the Authority's Workplace Learning Logbook. The student must also provide evidence of his/her knowledge and understanding of the workplace skills by completing the Authority's Workplace Learning Skills Journal after each 55 hours completed in the workplace.

General students are encouraged to apply for ADWPL placement.

Minimum Entrance Requirements:

Pre-Requisites: None

MATHEMATICS LEARNING AREA

Year 12 2024 Pathways

Course Name	General	ATAR
Mathematics Specialist		ATMAS
Mathematics Methods		ATMAM
Mathematics Applications		ATMAA
Mathematics Essentials	GTMAE	

The Mathematics Course

In the General Mathematics and Specialist Mathematics Courses, students have the opportunity to develop the conceptual structures necessary to make sense of mathematical ideas and relationships. They become able to use these structures competently, confidently and creatively in a variety of contexts, both inside and outside mathematics. They develop a range of mathematical skills helpful to handle a variety of ideas, relationships and applications.

Students develop fluency in a suite of standard mathematical outcomes in Number, Algebra, Space, Measurement, Chance and Data, including the thoughtful and selective use of appropriate technology. They develop fluency with mathematical methods to deal with applications in today's world, and also come to appreciate changes in the role and practice of mathematics over time in a range of context.

ATAR MATHEMATICS SPECIALIST - YEAR 12

COURSE CODE: ATMAS

University Pathway

Cost: \$60

Plus, textbooks approximately \$70 and must have a Casio ClassPad II Calculator

NOTE: Specialist attracts a Tertiary Entrance Aggregate Mathematics bonus. 10% of the scale score will be added to the student's tertiary entrance aggregate before their ATAR is calculated.

Structure of the syllabus

The Year 12 syllabus is divided into two units which are delivered as a pair. The notional time for each of the pair of units is 110 class contact hours.

In this course there is a progression of content, applications, level of sophistication and abstraction. For example, vectors in the plane are introduced in Year 11 Unit 1 and then in Year 12 Unit 3, they are studied for three-dimensional space. In Unit 3, the topic 'Vectors in three dimensions' leads to the establishment of the equations of lines and planes, and this in turn, prepares students for solving simultaneous equations in three variables.

Organisation of content:

Unit 3

This unit contains the three topics:

- 3.1 Complex numbers
- 3.2 Functions and sketching graphs
- 3.3 Vectors in three dimensions

Unit 4

This unit contains the three topics:

- 4.1 Integration and applications of integration
- 4.2 Rates of change and differential equations
- 4.3 Statistical inference

Further Study:

University science courses –engineering, mathematics.

Pre-Requisites and resources required:

- Strong 'C' Grade in Year 11 Mathematics Specialist course with the teacher recommendation.
- Achieved Category 3 for OLNA Numeracy
- Student must purchase the course textbook before the first lesson
- Student will have to obtain a Casio ClassPad II calculator

ATAR MATHEMATICAL METHODS - YEAR 12

Course Code: ATMAM

University Pathway

Cost: \$60

Plus, textbooks approximately \$75 and must have a Casio ClassPad II Calculator

NOTE: Methods attracts a Tertiary Entrance Aggregate Mathematics bonus. 10% of the scale score will be added to the student's tertiary entrance aggregate before their ATAR is calculated.

Structure of the syllabus

The Year 12 syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

Organisation of content:

Unit 3

Contains the three topics:

- Further differentiation and applications
- Integrals
- Discrete random variables.

The study of calculus continues by introducing the derivatives of exponential and trigonometric functions and their applications, as well as some basic differentiation techniques and the concept of a second derivative, its meaning and applications. The aim is to demonstrate to students the beauty and power of calculus and the breadth of its applications. The unit includes 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. Discrete random variables are introduced, together with their uses in modelling random processes involving chance and variation. The purpose here is to develop a framework for statistical inference.

Unit 4

Contains the three topics:

- The logarithmic function
- Continuous random variables and the normal distribution
- Interval estimates for proportions.

The logarithmic function and its derivative are studied. Continuous random variables are introduced and their applications examined. Probabilities associated with continuous distributions are calculated using definite integrals. In this unit, students are introduced to one of the most important parts of statistics, namely, statistical inference, where the goal is to estimate an unknown parameter associated with a population using a sample of that population. In this unit, inference is restricted to estimating proportions in two-outcome populations. Students will already be familiar with many examples of these types of populations.

Further Study:

University science courses – engineering, mathematics, accounting & finance

Pre-Requisites and resources required:

- Strong 'C' Grade in Year 11 Mathematics Methods course with the teacher recommendation
- Achieved Category 3 for OLNA Numeracy
- Student must purchase the course textbook before the first lesson
- Student must purchase a Casio ClassPad II calculator

ATAR MATHEMATICS APPLICATIONS – YEAR 12

Course Code: ATMAA

University Pathway

Cost: \$60

Plus, textbooks approximately \$70; and must have a Casio ClassPad II Calculator

Structure of the syllabus

The Year 12 syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

Organisation of content

Unit 3 - Contains the three topics:

- Bivariate data analysis
- Growth and decay in sequences
- Graphs and networks

'Bivariate data analysis' introduces students to some methods for identifying, analysing and describing associations between pairs of variables, including using the least-squares method as a tool for modelling and analysing linear associations. The content is to be taught within the framework of the statistical investigation process.

'Growth and decay in sequences' employs recursion to generate sequences that can be used to model and investigate patterns of growth and decay in discrete situations. These sequences find application in a wide range of practical situations, including modelling the growth of a compound interest investment, the growth of a bacterial population, or the decrease in the value of a car over time. Sequences are also essential to understanding the patterns of growth and decay in loans and investments that are studied in detail in Unit 4.

'Graphs and networks' introduces students to the language of graphs and the way in which graphs, represented as a collection of points and interconnecting lines, can be used to analyse everyday situations, such as a rail or social network.

Unit 4 - Contains the three topics:

- Time series analysis
- Loans, investments and annuities
- Networks and decision mathematics.

'Time series analysis' continues students' study of statistics by introducing them to the concepts and techniques of time series analysis. The content is to be taught within the framework of the statistical investigation process.

'Loans, investments and annuities' aims to provide students with sufficient knowledge of financial mathematics to solve practical problems associated with taking out or refinancing a mortgage and making investments.

'Networks and decision mathematics' uses networks to model and aid decision making in practical situations.

Further Study:

Training courses, mechanical & electrical apprenticeships, university studies

Pre-Requisites and resources required:

- Strong 'C' Grade in Year 11 Mathematics Application course with teacher recommendations
- Achieved Category 3 for OLNA Numeracy
- Student must purchase the course textbook before the first lesson
- Student must obtain a Casio ClassPad II calculator before the first lesson

GENERAL MATHEMATICS ESSENTIALS - YEAR 12

Course Code: GTMAE

This is a non-ATAR Course

General Pathway

Cost: \$60

Plus, Textbooks approximately \$80; and must have a Scientific Calculator

Structure of the syllabus

The Year 12 syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

Unit 3

This unit includes the following four topics:

- Measurement
- Scales, plans and models
- Graphs in practical situations
- Data collection

Unit 4

This unit includes the following three topics:

- Probability and relative frequencies
- Earth geometry and time zones
- Loans and compound interest

Each unit includes:

- a unit description – a short description of the focus of the unit and suggested contexts through which the content could be taught
- learning outcomes – a set of statements describing the learning expected as a result of studying the unit
- unit content – the content to be taught and learned, including examples in context which emphasise the intent of the course.

Throughout each unit, students apply the mathematical thinking process to real-world problems:

- interpret the task and gather the key information
- identify the mathematics which could help to complete the task
- analyse information and data from a variety of sources
- apply their existing mathematical knowledge and strategies to obtain a solution
- verify the reasonableness of the solution.

Further Study:

Training WA (TAFE) courses, apprenticeships, traineeships

Pre-Requisites and resources required:

- Strong 'C' grade or better in Year 11 GEMAE Maths with the teacher recommendation.
- Student must purchase the course textbook before the first lesson.

SCIENCE LEARNING AREA

Year 12 2024 Pathways

Course Name	General	ATAR
Biology		ATBLY
Chemistry		ATCHE
Human Biology	GTHBY	ATHBY
Physics		ATPHY
Integrated Science	GTISC	

ATAR BIOLOGY - UNIT 3 AND 4 - YEAR 12

COURSE CODE: ATBLY

University Pathway

Cost: \$95 - includes cost of excursion

Plus, textbooks approximately \$130

Course Outline:

In Year 12 Biology, students learn about the ways in which models and theories of organisms' and populations' responses to environmental change have evolved over time. They investigate the ways in which science contributes to contemporary debate about local, regional and international issues, including evaluation of risk and action for sustainability, and recognise the limitations of science to provide definitive answers in different contexts.

The Year 12 content is delivered in two units (Unit 3 and Unit 4).

Unit 3 – Continuity of species

Focuses on genetics. Students investigate the biochemical and cellular systems and processes involved in the transmission of genetic material. Biotechnological techniques are explored that are utilised in fields like forensics, conservation biology, medicine and modern food production involving genetically modified organisms. Inheritance patterns and processes will be looked at on the level of single cells and the level of next generation offspring. Students will consider different patterns of inheritance by analysing the possible genotypes and phenotypes of offspring. Plant and animal models will be used to describe patterns of inheritance. Students will explore how inheritance and genetic variation form the basis for species diversity and evolution of species over time.

Unit 4 – Surviving in a changing environment

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. Students study changes in the global distribution of vector-borne infectious diseases. They consider the factors that contribute to the spread of infectious disease and how outbreaks of infectious disease can be predicted, monitored and contained.

Minimum Entrance Requirements:

A 'C' grade or better in Year 11 ATAR Biology

Further Study:

Relevant to a range of careers, including those in medical, veterinary, food and marine sciences, agriculture, biotechnology, environmental rehabilitation, biosecurity, quarantine, conservation and eco-tourism.

ATAR CHEMISTRY – UNIT 3 AND 4 - YEAR 12

COURSE CODE: ATCHE

University Pathway

Cost: \$55

Plus, textbooks approximately \$150

Course Outline:

The Year 12 syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

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.

Minimum Entrance Requirements:

A 'C' grade or better in Year 11 ATAR Chemistry.

Further Study:

Many University science courses require Chemistry as a pre-requisite.



ATAR HUMAN BIOLOGY - YEAR 12

COURSE CODE: ATHBY

University Pathway

Cost \$95 - includes cost of excursion

Plus, new textbooks approximate costs \$133

Course Outline:

Human Biology covers a wide range of ideas relating to the functioning human. Students learn about themselves, relating structure to function and how integrated regulation allows individuals to survive in a changing environment. They research new discoveries that are increasing our understanding of the causes of dysfunction, which can lead to new treatments and preventative measures. Through a combination of classical genetics, and advances in molecular genetics, dynamic new biotechnological processes have resulted. Population genetics is studied to highlight the long-term changes leading to natural selection and evolution of our species.

The Year 12 content is delivered in two units (Unit 3 and Unit 4)

Unit 3 - Homeostasis and disease

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. Through investigating, students' research and collect data related to homeostasis and use models to represent disease transmission.

Unit 4 – Human variation and evolution

This unit explores the variations in humans, their changing environment and evolutionary trends in homonids. Students identify mutations as the source of human variation, though these may be favourable or unfavourable to our survival. Over time, the changing gene pool leads to evolutionary change. Evidence for these changes comes from studying fossils, comparative anatomy and biochemical studies. Science inquiry skills are developed using virtual biotechnological techniques of polymerase chain reaction (PCR), gel electrophoresis for DNA sequencing, and techniques for relative and absolute dating.

Minimum Entrance Requirements:

A 'C' grade or better in Year 11 ATAR Human Biology

Further Study:

Medical and paramedical fields, Laboratory Technician, childcare, science education, food and hospitality, sport and social work

ATAR PHYSICS - UNIT 3 AND UNIT 4 - YEAR 12

Course Code: ATPHY

University Pathway

Cost: \$50

Plus, textbooks approximately \$140

Course Outline:

Physics is a fundamental science that endeavours to explain all the natural phenomena that occur in the universe. Its power lies in the use of a comparatively small number of assumptions, models, laws and theories to explain a wide range of phenomena, from the incredibly small to the incredibly large. Physics has helped to unlock the mysteries of the universe and provides the foundation of understanding upon which modern technologies and all other sciences are based.

The Year 12 syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

Unit 3 – Gravity and electromagnetism

Field theories have enabled physicists to explain a vast array of natural phenomena and have contributed to the development of technologies that have changed the world, including electrical power generation and distribution systems, artificial satellites and modern communication systems. In this unit, students develop a deeper understanding of motion and its causes by using Newton's Laws of Motion and the gravitational field model to analyse motion on inclined planes, the motion of projectiles, and satellite motion. They investigate electromagnetic interactions and apply this knowledge to understand the operation of direct current motors, direct current (DC) and alternating current (AC) generators, transformers, and AC power distribution systems. Students also investigate the production of electromagnetic waves.

Unit 4 – Revolutions in modern physics

The development of quantum theory and the theory of relativity fundamentally changed our understanding of how nature operates and led to the development of a wide range of new technologies, including technologies that revolutionised the storage, processing and communication of information. In this unit, students examine observations of relative motion, light and matter that could not be explained by existing theories, and investigate how the shortcomings of existing theories led to the development of the special theory of relativity and the quantum theory of light and matter. Students evaluate the contribution of the quantum theory of light to the development of the quantum theory of the atom, and examine the Standard Model of particle physics and the Big Bang theory.

The Physics ATAR course requires students to use the mathematical skills they have developed through the Year 7–10 Mathematics curriculum, and a minimum of a C in Mathematics Applications or completion of a higher level Mathematics course, in addition to the numeracy skills they have developed through the Science Inquiry Skills strand of the Science curriculum.

Minimum Entrance Requirements:

A 'C' grade or better in Year 11 ATAR Physics

Further Study:

Many University science courses require Physics as a pre-requisite.

Important Note:

At times a compulsory revision/test lesson before school is required to allow students maximum feedback and assistance. Ideally, this will be on the day the Physics class has a period one class.

GENERAL INTEGRATED SCIENCE - UNIT 3 AND 4 - YEAR 12

COURSE CODE: GTISC

General Pathway

Cost: \$75 - including cost of Parks & Wildlife excursion

Course Structure:

The Year 12 Integrated Science syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

Unit 3 – Wetland Ecology

In this unit, students integrate ideas relating to the processes involved in the movement of energy and matter in ecosystems. They investigate and describe a number of diverse ecosystems, exploring the range of living and non-living components, to understand the dynamics, diversity and interrelationships of these systems.

They investigate ecosystem dynamics, including interactions within and between species, and interactions between living and non-living components of ecosystems. They also investigate how measurements of population numbers, species diversity, and descriptions of species interactions, can form the basis for comparisons between ecosystems.

Unit 4 – Vehicles and Drivers

This unit provides students with the opportunity to conduct scientific investigations that will increase their understanding of important scientific concepts and processes. They will investigate forces acting upon an object and the effects of kinetic, potential and heat energy on objects. Students will discover how increases in the understanding of scientific concepts have led to the development of useful technologies and systems.

Investigations and experimentation are incorporated into the delivery of this course and designed to further develop the students' skills in the areas of formulating hypothesis, planning, conducting, representing data in meaningful ways, interpreting data and scientific texts, and communicating findings to specific audiences using ICT and multimodal formats.

Minimum Entrance Requirements:

A 'C' grade or better in Year 11 Integrated Science General Course (GEISC).

Further Study:

TAFE / training certificate courses e.g. laboratory technician, aquaculture, marine studies.

GENERAL HUMAN BIOLOGY – UNIT 3 AND UNIT 4 - YEAR 12

COURSE CODE: GTHBY

General Pathway

Cost: \$85

Plus, textbooks approximately \$130

Course Structure:

The Year 12 General Human Biology syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

Unit 3 – Coordination

In this unit students explore bones, muscles, nerves and hormones and how they maintain the body to act in a coordinated manner. They investigate the structure and function of the musculoskeletal system provides for human movement, balance and growth as the result of coordinated actions. They explore how this is brought about by the interaction of the musculoskeletal system with the nervous and endocrine systems. They research conditions affecting these systems, such as sporting injuries, hearing and vision defects, can result in a decrease or loss of function.

Students investigate the musculoskeletal, nervous and endocrine systems through dissections and practical examination of reflexes, vision, hearing and skin sensitivity. They are encouraged to interpret and communicate their findings in a variety of ways.

Unit 4 – Infectious disease

In this unit students explore the causes and spread of disease and how humans respond to invading pathogens. They investigate how disease is caused by various pathogens that are transmitted between individuals and populations in many different ways.

Students will learn the prevention of transmission of disease can be achieved by adopting good hygiene practices at a personal, domestic and workplace level. They explore how the body responds naturally to disease in several ways, and how these actions of the body can be assisted by the use of medications, such as antibiotics, and the use of vaccines.

Students will reflect on how improvement in technology and transportation has resulted in humans becoming less geographically isolated, resulting in the transmission of disease becoming an increasing global issue. Students will learn the frequency of particular diseases in geographical areas is dependent upon population density and standards of sanitation and health services.

Students investigate transmission of diseases using second-hand data from a historical perspective and recent global incidences. They consider how data is used to inform personal decisions and community responses related to disease prevention and control. They are encouraged to use ICT to interpret and communicate findings in a variety of ways.

Minimum Entrance Requirements:

A 'C' grade or better in Year 11 General Human Biology course (GTHBY)

Further Study:

TAFE/training certificate courses e.g. Health Science, Nutritional Medicines, Sports & Fitness

TECHNOLOGIES

COMPUTING AND BUSINESS EDUCATION

Year 12 2024 Pathways

Course Name	General	ATAR
Certificate II in Workplace Skills	BSB20120 Certificate II Workplace Skills	
Certificate III in Information Technology	ICT30120 Certificate III Information Technology	
Computer Science	GTCSC	ATCSC
Certificate III in Business	BSB30120 Certificate III Business	

* Certificate III courses are delivered over a two-year period (Year 11 and Year 12)

BSB20120 - Certificate II in Workplace Skills

Course Code: BSB20120

General Pathway

Cost: \$95

****Full payment must be made upfront in order to enrol in this course***

Qualification Description

This qualification reflects the role of individuals in a variety of entry-level Business Services job roles. This qualification also reflects the role of individuals who have not yet entered the workforce and are developing the necessary skills in preparation for work.

These individuals carry out a range of basic procedural, clerical, administrative or operational tasks that require self-management and technology skills. They perform a range of mainly routine tasks using limited practical skills and fundamental operational knowledge in a defined context. Individuals in these roles generally work under direct supervision.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 10

5 core units plus

5 elective units, of which:

1 elective unit must be selected from Group A

1 elective unit must be selected from Group B

For the remaining 3 elective units:

Up to 3 units may be selected from Groups A, B and C

If not listed, up to 2 units may be selected from a Certificate I, Certificate II or Certificate III from this or any other currently endorsed Training Package qualification or accredited course.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome.

ICT30120 - Certificate III in Information Technology - YEAR 12

(Two Year course)

Course Code: C3IT

General Pathway

Cost: \$100*

***Full payment must be made upfront in order to enrol in this course**

Course outline

This qualification reflects the role of individuals who are competent in a range of Information and Communications Technology (ICT) roles, including animation, basic cloud computing, basic cyber awareness, digital media skills, generalist IT support services, networking, programming, systems and web development.

Individuals who work in these fields apply broad sets of skills, including foundational knowledge in critical thinking and customer service skills, to support a range of technologies, processes, procedures, policies, people and clients in a variety of work contexts.

To attain **the ICT30120 Certificate III in Information Technology** 12 units must be achieved (see packaging rules below).

Some of the key concepts which will be covered include:

- Provide ICT advice to clients
- Apply introductory programming techniques
- Install, configure and secure a small office or home office network
- Build simple web pages
- Connect internal hardware components

Minimum entrance requirements:

Students should have completed 6 of the Certificate III in Information Technology units of competency in Year 11

Further Study:

TAFE or employment. The qualification provides foundation general computing and employment skills that enable participation in an information technology environment in any industry. In its own right such a qualification could equip an individual to undertake roles such as office assistant or to work in records management at a junior level.

Packaging Rules – ICT30120 (Certificate III)

12 units must be completed

6 core units **plus**

6 elective units

For details of core and elective units go to <https://training.gov.au/Training/Details/ICT30120>

ATAR COMPUTER SCIENCE – YEAR 12

Course Code: ATCSC

University Pathway

Cost: \$60

Course Outline:

The Computer Science ATAR course focuses on the fundamental principles, concepts and skills within the field of computing and provides students with opportunities to develop flexibility and adaptability in the application of these and in the roles of developers and users.

Knowledge and skills in computer science are practically applied to the development of computer systems and software, networks, peripheral devices and applications used in the home and workplace. Students develop technical skills as they learn how to diagnose and solve problems throughout the course whilst understanding the building blocks of computing.

In this course the impact of technological developments on the personal, social and professional lives of individuals, businesses and communities is investigated. The ethical, moral and legal factors that influence computing are explored so that students recognise the consequences of decisions made by developers and users in respect to the development and use of technology.

This course also provides students with 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. It provides a sound understanding of computing to support students pursuing further studies in related fields.

The year 12 syllabus is divided into two units, which are delivered as a pair. Design and Development of computer-based systems and database solutions and Design and Development of communication systems and software solutions.

Unit 3 – Design and developing computer-based systems and database solutions

In this unit, students understand the design concepts and tools used to develop relational database systems. They consider the complex interactions between users, developers, the law, ethics and society when computer systems are used and developed.

Unit 4 – Design and development of communication systems and software solutions

In this unit, students gain the knowledge and skills to create software. They use algorithms and structured programming to design and implement software solutions for a range of problems using the Software Development Cycle. Students examine attitudes and values that lead to the creation and use of computer-based systems and their effect on society. Students consider networks, communication systems, including security and protocols.

Assessment: Assessment of student performance is based on a set of tasks designed to measure performance of a number of outcomes. A range of assessment tasks will be used and include practical and written works and two end of semester examinations.

WACE examination: All students enrolled in the Computer Science ATAR Year 12 course are required to sit the WACE examination. The examination is based on a representative sampling of the content for Unit 3 and Unit 4.

Minimum entrance requirements:

It is expected that students completed the Year 11 Computer Science unit at ATAR level.

Further study:

University studies.

No additional requirements.

GENERAL COMPUTER SCIENCE – YEAR 12

Course Code: GTCSC

General Pathway

Cost: \$60

Course Outline:

The Computer Science General course focuses on the fundamental principles, concepts and skills within the field, and provides students with opportunities to develop flexibility and adaptability in the application of these in the roles of developers and users. The underpinning knowledge and skills in computer science are practically applied to the development of computer systems and software, while the connectivity between computers, peripheral devices and software used in the home, workplace and in education are examined. Students develop problem-solving abilities and technical skills as they learn how to diagnose and solve problems in the course of understanding the building blocks of computing.

In this course, the impact of technological developments on the personal, social and professional lives of individuals, businesses and communities are investigated. The ethical, moral and legal factors that influence developments in computing is explored so that students recognise the consequences of decisions made by developers and users in respect to the development and use of technology.

This course provides students with 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. It provides a sound understanding of computing to support students pursuing further studies in related fields.

The Year 12 syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

Unit 3- Developing computer-based systems and producing spreadsheet 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- Developing computer-based solutions and communications

The focus for this unit is on developing 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.

Minimum entrance requirements:

It is expected that students completed the Year 11 Computer Science (GECSC) unit in Year 11.

Further study:

TAFE studies.

Additional requirements:

This course includes an excursion to the Big Day-In, which is an expo showcasing IT careers that incorporate Computer Science skills.

BSB30120 - Certificate III in Business

Course Code: C3BUS

General Pathway

Cost: \$95

****Full payment must be made upfront in order to enrol in this course***

Qualification Description

This qualification reflects the role of individuals in a variety of entry-level Business Services job roles. This qualification also reflects the role of individuals who have not yet entered the workforce and are developing the necessary skills in preparation for work.

These individuals carry out a range of basic procedural, clerical, administrative or operational tasks that require self-management and technology skills. They perform a range of mainly routine tasks using limited practical skills and fundamental operational knowledge in a defined context. Individuals in these roles generally work under direct supervision.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

Nil

Packaging Rules

Total number of units = 10

5 core units plus

5 elective units, of which:

1 elective unit must be selected from Group A

1 elective unit must be selected from Group B

For the remaining 3 elective units:

Up to 3 units may be selected from Groups A, B and C

If not listed, up to 2 units may be selected from a Certificate I, Certificate II or Certificate III from this or any other currently endorsed Training Package qualification or accredited course.

Elective units must be relevant to the work environment and the qualification, maintain the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome.

TECHNOLOGIES

DESIGN & TECHNOLOGY

Year 12 2024 Pathways

Course Name	General
Automotive Engineering Technology	GTAET Units 3 & 4
Building & Construction	GTBCN Units 3 & 4
Materials, Design and Technology (Wood)	GTMDTW Units 3 & 4
Materials, Design and Technology (Metal)	GTMDTM Units 3 & 4

GENERAL AUTOMOTIVE - YEAR 12 AUTOMOTIVE ENGINEERING TECHNOLOGY

Course Code: GTAET

UNITS 3 & 4

Cost \$90

Course Outline:

This general course enables young people to gain entry level skills and knowledge and to help them decide whether they want a career in the automotive industry. This may include:

- Motor Mechanic
- Heavy Vehicle Mechanic
- Brake Mechanic

The course is delivered in a practical way inside a workshop and covers areas such as battery testing and replacement, OH&S, measuring and replacing parts, servicing vehicles and dismantling engines.

Assessment:

All of the assessment in this course is through practical demonstration and oral/written assessment of the skills learnt.

Further Study and Career Opportunities:

This course is suitable as a starting point for students wishing to pursue a career in the automotive industry.

Pre-Requisites:

It is expected that students completed Year 11 Automotive Engineering Technology (GEAET).



GENERAL BUILDING & CONSTRUCTION – YEAR 12

Course Code: GTBCN

UNITS 3 & 4

General Pathway

Cost \$90

Course Outline:

The focus for this course is **introduction to building and construction**. The course explores properties of common construction materials. Some of the areas that the students will gain skills in are:

- Bricklaying
- Paving
- Mixing cement
- Basic construction techniques

A variety of materials are worked with and a range of practical skills are developed. Following Occupational Safety and Health rules and regulations plays an important part of this course.

The focus of the course then shifts to the **basics of building and construction**. This unit introduces properties of common construction materials. Some of the areas that the students will gain skills in are:

- Working with standard building materials – wood, bricks, pavers, mortar, cement
- correct use of power tools,

Following Occupational Safety and Health rules and regulations plays an important part of this course.

Further Study and Career Opportunities:

This course is suitable as a starting point for students wishing to pursue a career in the construction industry.

Pre-Requisites:

It is expected that students completed Year 11 General Building and Construction (GBCN).



GENERAL WOOD TECHNOLOGY MATERIALS DESIGN TECHNOLOGY (WOOD)

Course Code: GTMDTW

General Pathway

Cost: \$90

(plus supplying recycled timber to produce major project)

Course Outline:

The focus for this unit is **DESIGN TECHNIQUES** in the area of wood. Materials are the basic ingredients of technology.

The Materials Design and Technology General course is a practical course. Students examine social and cultural values and the short term and long term impacts of the use and misuse of materials mainly wood and associated technologies.

Working with wood, students develop a range of manipulation, processing, manufacturing and organisational skills.

The main areas of study are:

- Technology process-design work/portfolio
- Understanding the use of materials-working with wood especially recycled timber which students must source for themselves.
- Using technology skills-power and hand tools, heavy machinery such as thicknesses, buzzer, panel saw, routers, to name a few.
- Understanding materials, society and the environment-reduce, reuse and recycle

The major emphasis of the Year 12 course is for the students to produce a major project using recycled timber.

Further Study and Career Opportunities:

Suitable background course for students wanting to work in wood (carpentry) trades.

Minimum Entrance Requirements:

It is expected that students completed Year 11 Materials Design and Technology Wood (GEMDTW).



GENERAL METAL TECHNOLOGY

MATERIALS DESIGN TECHNOLOGY (METAL)

Course Code: GTMDTM

General Pathway

Cost: \$90

Course Outline:

The Materials Design and Technology General course is a practical course. Students can work with metal to design and manufacture products as the major focus.

Students will 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

Key skills that this course will cover:

- Marking and setting out work.
- A variety of welding techniques.
- Sheet metal work.
- Machining using a lathe.
- Metal finishing.

Further Study and Career Opportunities:

Suitable background course for students wanting to work in metal trades.

Minimum Entrance Requirements:

It is expected that students completed Year 11 Material Design and Technology Metals (GEMDTM).



TECHNOLOGIES

HOME ECONOMICS

Year 12 2024 Pathways

Course Name	General
Community Services	CHC22015 Certificate II in Community Services
Food Science & Technology	GTFST GENERAL COURSE
Hospitality	SIT20322 Certificate II in Hospitality

All the Home Economics courses are practical, engaging and enjoyable, while providing valuable skills for young people in their transition to independent living.

The Home Economics courses are typically delivered over two years, with continuing enrolment from Year 11 into Year 12. Students wishing to join a course for the first time in Year 12, or not continue their enrolment from Year 11, should consider how this may affect their graduation requirements.

CHC22015 - Certificate II COMMUNITY SERVICES – YEAR 12

Course Code: C2COM

General Pathway

Cost: \$100*

***Full payment must be made upfront in order to enrol in this course**

Course Outline:

The Community Services Industry is vital to sustaining the wellbeing of communities in Australia. Community service workers not only provide child care services that benefit many Australians, they also provide welfare and support services to assist some of the most vulnerable people in the community. Activities within this sector include direct community service activities provided to individuals and families, and other community sector activities including working with groups and communities, social planning, advocacy and social action, as well as assistance to other organisations. All of these areas are continuing to experience ongoing job growth.

In this course students will develop the knowledge and skills to provide support for children and youth, including those with disabilities. Students will complete many practical activities and interact with infants, children and youth, through the running of a playgroup, visiting the Belridge Education Support Centre, and caring for their own 'virtual' baby.

The Community Services course provides students with the opportunity to achieve nationally recognised vocational qualifications. It requires completion of nine units of competence, five core units and four elective units. The elective units have been selected to provide an introduction to a broad range of knowledge and experience across various contexts of the Community Services Industry. To meet the course requirements and be awarded the full Certificate II in Community Services, this course must be studied over two years and **ALL** of the units of competency successfully completed.

Career Pathways

This qualification may be used as a pathway for workforce entry as Community Services workers who provide first point of contact and assist individuals in meeting their immediate needs. At this level, work takes place under direct, regular supervision within clearly defined guidelines. This qualification may also provide an appropriate pathway into higher level qualifications, such as those in aged and home care, disability, community and child care.

Minimum Entrance Requirements/Pre-Requisites:

Continuing enrolment from Year 11

Packaging Rules:

Total number of units = 9

5 core units **plus**

4 elective units

For details of core and elective units go to <https://training.gov.au/Training/Details/CHC22015>

GENERAL FST FOOD SCIENCE AND TECHNOLOGY- YEAR 12

Course Code: GTFST

General Course

Cost: \$110*

***Full payment must be made upfront in order to enrol in this course**

Course Outline:

Food is a wonderful way to explore new frontiers – with new products continually evolving; new style eateries popping up all over the place; and providing the opportunity to work in an industry that will give you skills transferable throughout the world.

The Food Science and Technology General course will assist you in pursuing your goals, whether they include learning the skills for simple creative enjoyment, knowledge for making the most of your health and future lifestyle, or gaining information that will provide the foundations for you to use into the future.

The Year 12 syllabus is divided into two units, each of one semester duration, which are delivered as a pair.

Unit 3 - Food Science

This unit explores the societal, lifestyle and economic issues that influence food choices. Students research the effect of under-consumption and over-consumption of nutrients on health and investigate a range of diet-related health conditions that affect individuals and families. Using scientific methods, students examine the functional properties that determine the performance of food and apply these in the planning and preparation of food products and processing systems. Students develop their expertise with technology and communication skills to implement strategies to design food products and processing systems. They select resources to meet performance requirements and use evaluation strategies to monitor and maintain optimal standards. Students follow occupational safety and health requirements, implement safe food handling practices and use a variety of foods and processing techniques to produce safe, quality food products.

Unit 4 - The Undercover Story

This unit focuses on food spoilage and contamination and explores reasons for preserving food. Students investigate food processing techniques and the principles of food preservation. They examine the regulations which determine the way food is packaged, labelled and stored and how the principles of the Hazard Analysis Critical Control Point (HACCP) system are administered and implemented to guide the production and provision of safe food. Students investigate the food supply chain and value-adding techniques applied to food to meet consumer and producer requirements. Food choices are often determined by location, income, supply and demand, and the environmental impact of food provision. Students examine influences on the nutritional wellbeing of individuals that arise from lifestyle and cultural traditions. They implement principles of dietary planning and adapt recipes and processing techniques when considering specific nutritional needs of demographic groups. Students apply the technology process to address a product proposal and produce a preserved food product. They justify the equipment, resources, and processing techniques used, and evaluate sensory properties. Students show the use of the preserved food product in another food product.

Career Pathways

Food and allied health sectors represent a robust and expanding area of the Australian and global employment markets. The Food Science and Technology course enables students to connect with further education, training and employment pathways, and enhances employability and career opportunities in areas that include nutrition, health, food and beverage manufacturing, food processing, community services, hospitality, and retail.

Minimum Entrance Requirements/Pre-requisites:

Continuing enrolment from Year 11

SIT20322 - CERTIFICATE II HOSPITALITY - YEAR 12

Course Code: C2HOSP

General Pathway

Cost: \$160*

***Full payment must be made upfront in order to enrol in this course**

Course Outline:

Hospitality is the business of helping people to feel welcome and relaxed and to enjoy themselves. It is one of the most interesting and challenging industries to work in and offers a wide range of job and career opportunities and an endless variety of places to work. Hospitality is a booming industry and once qualified, you can work and travel the world. Whether providing customers with accommodation, a meal, a beverage or even entertaining them, it is all about customer service and providing the best experience possible.

In this course students will perform a range of activities and functions requiring basic Hospitality knowledge and practical skills. Students will participate in food preparation, provide espresso coffee service, and cater functions, some of which will be outside of regular school hours.

The Hospitality course provides students with the opportunity to achieve nationally recognised vocational qualifications. It requires completion of 12 units of competence, 6 core units and 6 elective units. The elective units have been selected to provide an introduction to a broad range of knowledge and experience across various contexts of the Hospitality industry. To meet the course requirements and be awarded the full Certificate II in Hospitality, this course must be studied over two years and **ALL** of the following units of competency successfully completed.

Career Pathways

This qualification may be used as a pathway for workforce entry as Hospitality workers. At this level, work takes place under direct, regular supervision within clearly defined guidelines. This qualification may also provide an appropriate pathway to higher level qualifications, such as those in kitchen operations, events management and, tourism and travel.

Minimum Entrance Requirements/Pre-requisites:

Continuing enrolment from Year 11

Packaging Rules:

Total number of units = **12**

6 core units **plus**

6 elective units

For details of core and elective units go to <https://training.gov.au/Training/Details/SIT20322>