

Year 12 - Choices 2018

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Principal's Welcome



Welcome to the Belridge Secondary College Year 12 Selection Book for 2018.

Belridge SC aims to develop a school community that encourages personal, social and environmental responsibilities. The College has student achievement at the heart of our endeavours, and our staff have dedicated their efforts over a long period of time to improve learning outcomes for students in a wide range of domains.

Our College places emphasis on high levels of academic achievement - our ATAR performance over time has enabled the College to offer a comprehensive University Pathway course selection. Our strong VET results are evidenced by our systemically significant Attainment rate. Our students, when in the right pathway, with the right support from both parents and the College staff, are successful students.

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.

Year 12 is the culmination of the formal schooling for Western Australian students, and course selection requires attention to detail from all of us – students, parents and staff – to make sure that all of our students are successful students.

I look forward to working with you over the course of the next twelve months to make this occur.

JOHN BURKE
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 books to purchase as well as course charges. Books are available from OfficeMax or Champions. 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 river cruise, school ball, etc.).

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, Mr Greg Carey. Applications should be made at the beginning of each school year.

TO ACHIEVE A WACE, STUDENTS MUST:

- Complete a Literacy and Numeracy Assessment to demonstrate a minimum standard based on skills regarded as essential for individuals to meet the demands of everyday life and work in a knowledge-based economy.
- Complete **a minimum of four Year 12 ATAR courses** including the external examination (i.e. be eligible for an ATAR) **or complete a VET Certificate II or higher.**
- Complete two Year 11 English units and a pair of Year 12 English units.
- Complete at least 20 units (or equivalents) including a minimum of 10 Year 12 units.
- Complete at least one pair of units from a List A course and one pair of units from a List B course in Year 12.
- Achieve a minimum of 14 C grades in Year 11 and Year 12 units (or equivalents) **including at least 6 C grades in Year 12 units** (or equivalents).

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.*

LITERACY AND NUMERACY ASSESSMENT

- To achieve a WACE, students will be required to complete the Online Literacy and Numeracy Assessment (OLNA) and demonstrate achievement at or above a minimum standard, or have previously achieved Band 8 or higher in the associated component of their Year 9 NAPLAN tests.
- The OLNA has three components – reading, writing and numeracy.
- If the student does not meet the standard in Semester 1, then they must sit in Semester 2.

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. These have been shaded on the grid contained in your selection sheet.
2. Check this grid.
3. Have your current Year 11 ATAR teachers signed the line on the grid to indicate you are capable of attempting the Year 12 course.
4. If you decide to change the courses on this grid, for any reason, you must make an appointment with Mr Strickland, Mr Notarpietro or Mr Pisano. Changed grids will not be accepted without approval of one of these administration members.
5. 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 2017 Requirements for School Leavers*** which can be downloaded from www.tisc.edu.au

For 2017 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.

Each line of your selection grid needs to be signed by your current Year 11 teacher.

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), normally a ATAR course pathway, **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 a VET (general courses and certificates) pathway need to do a minimum of 1.5 hours per course per week, each and every week. That means that a typical six course unit 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 Senior School Assessment Policy, available on the school website

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 'B' average in five of those courses. Students may also need to demonstrate a capacity to effectively use independent study time. This option is NOT available to students studying all general courses or a combination that has less than four ATAR Courses. Applications must be made to the Vice Principals 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, a school leaver ATAR applicant should have:

- (a) met the **WACE** requirements as prescribed by SCSEA.
- (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.

Note:

Students in Year 12 in 2017 should refer to the 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

ENTRANCE REQUIREMENTS

TRAINING WA (Institutes of Training) is constantly reviewing and adjusting their entry processes for school leavers.

Parents and students should access the latest and most detailed information from

<http://www.dtwd.wa.gov.au/employeesandstudents/training>

As a guide only, key points of the new TRAINING WA entry requirements include:

Qualifications offered by Training WA (TAFE) will be divided into two groups.

- The **first group** of qualifications will require applicants to address **entry requirements only**. These are qualifications for which there are more places available than applicants.
- The **second group** of qualifications will require applicants to address **both entry requirements and selection criteria** – these are qualifications for which there are more applicants than places available. Selection criteria will focus on past secondary education achievement/skill development, previous qualifications and workplace experience, whether paid or unpaid.

Training WA (TAFE) Selection Criteria Maximum 100 points		
Secondary Education Achievement/Skill Development [Maximum 42 points]	Workplace Experience And Employment [Maximum 29 points]	Previous Qualifications [Maximum 29 points]
Points allocated according to levels of achievement in three courses, including English or Literature or English as a Second Language or Dialect.	Points allocated for each hour of WPL, work experience, volunteer and paid or unpaid work.	Points allocated for any part or full AQTF Certificate or Degree qualification already achieved.

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.

Students **must select a minimum of four ATAR level Year twelve full year courses**. These courses are identified by the first two letters of the course code:

A(ATAR) **T**(Twelve) e.g. **ATENG**

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

Vocational/Training Pathway

Students must complete at least one VET Certificate II or III course.

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, would typically include in their program of study a Maths course, combined with VET Certificate courses in their area of interest and part time work and/or workplace learning and/or volunteer or other workplace experience.

Students must achieve to the highest level of which they are capable. Completing a VET Certificate II qualification (AQTF Certificate) at school will increase a student's chances of entry to competitive TRAINING WA courses and meet one of the WACE (graduation) requirements.

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

THE ARTS LEARNING AREA

Year 12 – 2018 Pathways

Course Name	VET/General	ATAR
Dance	GTDAN	ATDAN
Drama	GTDRA	ATDRA
Design: Photography	GTDES	
Visual Art	GTVAR	ATVAR
Fashion Design	MST20616 Certificate II in Applied Fashion Design and Technology	
Media Production & Analysis	GTMPA	

GENERAL DANCE – YEAR 12

Course Code: GTDAN

Vocational Pathway

Cost \$80 - plus money for excursions to dance performances

The Dance General course develops and presents ideas through a variety of genres, styles and forms, as it provides a unique way in which to express our cultural view and understanding of the world. Through critical decision making in individual and group work, movement is manipulated and refined to reflect the choreographer's intent.

Students use a wide range of creative processes, such as improvisation and the use of choreographic elements and devices, and draw on their own physicality and the interpretation of existing work of others to make dance works.

N.B. Students may be required to attend rehearsals outside of school hours and take part in dance festivals, school assemblies, end of year concerts and other performances in the community.

This unit include a compulsory internal examination.

Minimum Entrance Requirements

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

ATAR DANCE – YEAR 12

Course Code: ATDAN

University Pathway

Cost \$80 - plus money for excursions to dance performances

The Dance ATAR course develops and presents ideas through a variety of genres, styles and forms, as it provides a unique way in which to express our cultural view and understanding of the world. Through critical decision-making in individual and group work, movement is manipulated and refined to reflect the choreographer's intent. Students use a wide range of creative processes, such as improvisation and the use of choreographic elements and devices, and draw on their own physicality and the interpretation of existing work of others to make dance works.

Students experience an intrinsic sense of enjoyment and personal achievement through expressing and challenging themselves physically. As a physical art form, dance is able to offer an opportunity for them to achieve an elite level of movement skills. They gain an understanding of the physical competencies specific to dance, including experiential anatomy (movement specific alignment), strength, flexibility, coordination and rhythmic understanding, while learning to use the body as a medium for artistic expression. The study of dance draws on other disciplines, including yoga, martial arts and gymnastics. It is essential that students demonstrate safe dance practices and understand health issues that will enhance their general physical well-being and prolong their dance involvement.

N.B. Students may be required to attend rehearsals outside of school hours and take part in dance festivals, school assemblies, end of year concerts and other performances in the community.

These units include a compulsory external examination.

Minimum Entrance Requirements

C grade or better in AEENG. Ideally, students would have studied AEDAN in Year 11 or have attended private dance lessons.

Further Study

Leads to future studies in Performing Arts/Dance at WAAPA, TAFE and University.

GENERAL DESIGN: PHOTOGRAPHY – YEAR 12

Course Code: GTDES

Vocational Pathway

Cost \$120*

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

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.
- Some areas of study may include: Photography: magazine design; fashion label 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

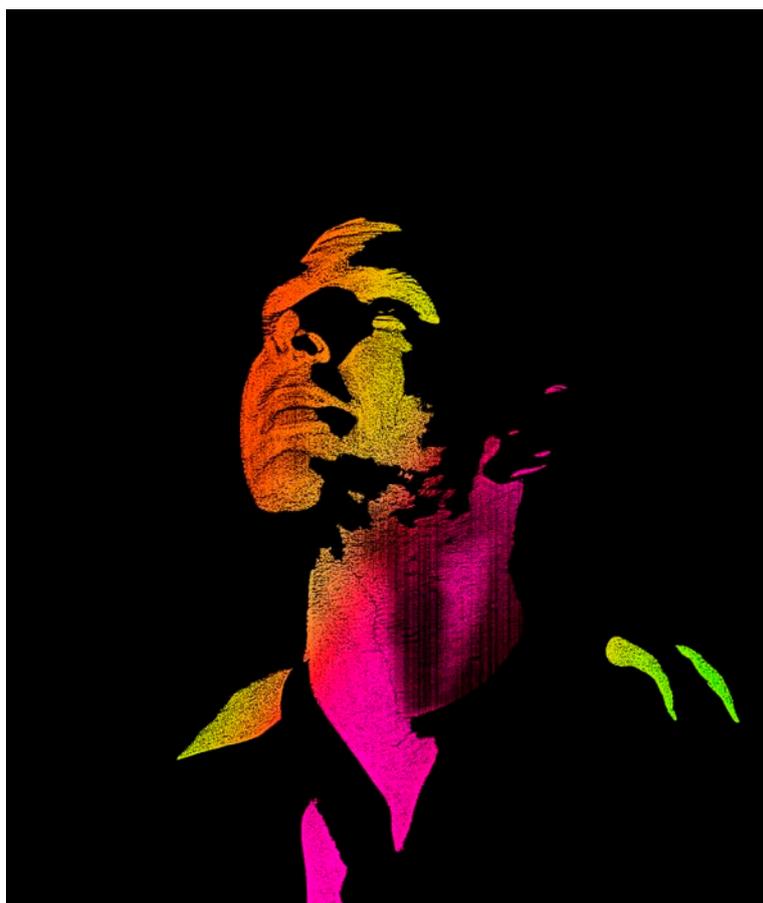
- Students explore Graphic Design and Photography techniques working through the design process to format creative ideas that relate to product design.
- Students learn that society is made up of different groups of people who share diverse values, attitudes, beliefs, behaviours and needs; and that different 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 DRAMA – YEAR 12

Course Code: GTDRA

Vocational 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

ATAR DRAMA – YEAR 12

Course Code: ATDRA

University Pathway

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

Course Outline

The Drama ATAR 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, 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 external examination.

Minimum Entrance Requirements

Students need to receive an A or B in English. Ideally, students would have studied AEDRA in Year 11 or have attended private drama lessons.

Further Study

Leads to Tertiary studies at TAFE, and all universities, as well as at the WA Academy of Performing Arts. Some careers associated with drama studies include Acting, Stage Design, Public Relations, Directing, Teaching, Marketing, Lighting/sound industry, Journalism, Motivational Speaking, Costume Design, Media Industry and Make-up Artist.

MST20616 CERTIFICATE II IN APPLIED FASHION DESIGN & TECHNOLOGY GENERAL FASHION – YEAR 12

Course Code: C2FAS

Vocational Pathway

Cost \$100*

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

A fee of \$100 (each year) will provide the student with fabrics, threads, notions (zips, buttons etc..) and papers/cards that are required to complete the certificate. Extra costs may be incurred by the student should they choose to use exotic fabrics and embellishments such as silk, brocade and crystal beads.

Course Outline

Learn to draw like a fashion designer and use these skills to enter the Wool4School design competition and have a chance to win great prizes. Learn the basics of sewing and develop a portfolio of techniques. Modify patterns to create new designs plus how to create cutaway pockets, how to insert an invisible zip & more. Discover the wondrous elements and principles of design. All students will also be offered an opportunity to enter the APEX Teenage Fashion Awards.

Students will create and develop an A3 portfolio that showcases a variety of techniques as well as highlighting their flare for design.

This is a two year course beginning in Year 11 and continuing in Year 12.

Units of Competence

MSTFD2001	Design and produce a simple garment
MSTCL1001	Produce a simple garment
MSTFD2005	Identify design process for fashion designs
MSTGN2009	Operate computing technology in a TCF workplace
MSMENV272	Participate in environmentally sustainable work practices
MSTCL2010	Modify patterns to create basic styles

Minimum Entrance Requirements

A passion for fashion is necessary. Completion of Year 10 Fashion & Design is desirable but not crucial. Students need to have a genuine interest in designing and have achieved a C grade in both Year 10 English and Arts related courses.

Further Study

Leads to Bachelor of Arts (Fashion and Textile Design) at Curtin University. Certificate IV Applied Fashion and Design and Technology at South Metropolitan TAFE.



GENERAL MEDIA PRODUCTION AND ANALYSIS – YEAR 12

Course Code: GTMPA

Vocational Pathway

Cost \$90

Course Outline

The Media Production and Analysis General course aims to prepare all students for a future in a digital and interconnected world by providing the skills, knowledge and understandings to tell their own stories and interpret others' stories.

Students learn the languages of media communication and how a story is constructed using representations. Students are encouraged to explore, experiment and interpret their world, reflecting and analysing contemporary life while understanding that this is done under social, cultural and institutional constraints. Students as users and creators of media products, consider the important role of audiences and their context.

The creation of convergent and hybrid media means that the system of communication changes as new media are developed. The local and global media contexts are continuously interacting, making audiences global consumers of media products. Through the consumption of global media work, awareness of global issues creates a collective consciousness and sense of responsibility, giving rise to the notion of audiences also being global citizens. Through the process of investigation, students are able to engage with topics, issues and themes which have global and local relevance and artistic movements and styles which in turn, create new notions of media aesthetics. The production of media work enables students to demonstrate their understanding of the key concepts of media languages, representation, audience, production, skills and processes as well as express their creativity and originality. When producing media work, students learn to make decisions about all aspects of production, including creative choices across pre-production, production and post-production phases. This provides an opportunity for students to reflect on and discuss their own creative work, intentions and outcomes. Within this process, skills are developed enabling students to manipulate technologies which simulate industry experiences.

Unit 3 – Entertainment

Within this broad focus, students will expand their understanding of media languages, learning how codes and conventions are used to construct entertainment media. Students examine the process of representation and the way values are constructed in media work. Students consider how the experiences of audiences influence their responses to media and how media work is shaped by the production context and through the production process. Students analyse, view, listen to and interact with interesting and relevant media work. They also generate ideas and learn production skills and processes as they apply their knowledge and creativity in their productions.

Unit 4 – Representation and Reality

The focus for this unit is on representation and reality. Representation is the act of re-presenting or constructing identities, places or ideas based on shared values and understandings. Students will consider different types of representations and how they relate to the construction of reality within media work. Within this broad focus, students have the opportunity to choose from a range of media genres and styles and examine ways in which codes, conventions and techniques are used to dramatise and re-present reality while at the same time engaging and informing audiences. In contexts related to representation and reality, students analyse, view, listen and interact with a variety of media work. They learn about production controls, constraints and responsibilities. Students continue to develop strategies and production skills when creating their own media work.

Minimum Entrance Requirements

'C' passes in English, GEMPA

Further Study

Tertiary studies

GENERAL VISUAL ART – YEAR 12

Course Codes: GTVAR

Vocational Pathway

Cost \$80 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 an external task.

Pre-requisites:

A 'C' in a Year 10 Visual Arts related course.

Further Study

TAFE Visual and Creative Arts Certificate courses.

ATAR VISUAL ART – YEAR 12

Course Codes: ATVAR

University Pathway

Cost: \$80

Students will be required to pay for a class excursion to view works of art. This is an integral part of this course (usually \$25).

Course Outline

Unit 3 - Commentaries

The focus for this unit is **commentaries**. In this unit, students engage with the social and cultural purposes of art making to produce a unique and cohesive body of work. Broad and innovative inquiry includes the conceptualisation and documentation of experiences within contemporary society. Students transform ideas and develop concepts using innovative approaches to art-making and presentation. They document their thinking and working practices, having the flexibility to work across media and art forms.

Student's research artwork providing critical comment on the meaning, purpose and values communicated. They examine their own beliefs and consider how the visual arts have reflected and shaped society in different times and places. Consideration is given to the roles of artists in different societies, for example, hero, outsider, commentator and social critic. Students investigate the social functions of art, for example political and ideological expression, satire, social description or graphic communication. They address the relationship between form, function and meaning and develop understandings of how artists are influenced by pervasive ideas, events and circumstances, and how re-contextualisation contributes to meanings and messages in artwork.

Unit 4 – Points of View

The focus for this unit is **points of view**. Students identify and explore concepts or issues of personal significance in the presentation of a sustained, articulate and authentic body of work. They engage in sustained inquiry, exploring ideas and developing concepts to communicate a personal point of view.

Students investigate a range of solutions using visual language and document the progressive resolution of thinking and working practices. Skills, techniques and processes are combined in the pursuit of new art forms, innovation and personal style.

Students use critical analysis frameworks to develop an understanding of the practice of art making and art interpretation. They research and analyse factors affecting points of view such as time, place, culture, religion and politics, synthesising this knowledge to express a personal viewpoint or position. In the analysis of their own and others' artwork, students reflect on the relationship between artwork, audiences and contextual factors, and consider how these contribute to the development of different perspectives.

The course will be 50% Practical / 50% Written

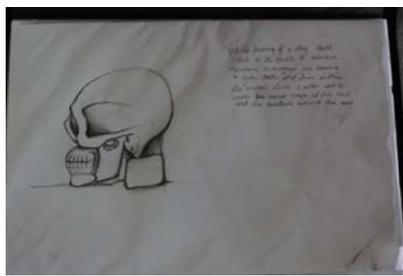
These units include a compulsory external examination.

Pre-requisites:

Successful completion of Year 11 ATAR Visual Art and Year 11 ATAR English.

Further Study

TAFE, University



ENGLISH LEARNING AREA

Year 12 - 2018 Pathways

Course Name	VET/ General		ATAR	
	2017 Year 11	2018 Year 12	2017 Year 11	2018 Year 12
English	GEENG	GTENG	AEENG	ATENG
Literature			AELIT	ATLIT

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

Vocational 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 LITERATURE – YEAR 12

Course Code: ATLIT

University Pathway

Cost \$90

Students are expected to purchase their own copy of texts

Course Outline

The Literature ATAR course focuses on the study of literary texts and developing students as independent, innovative and creative learners and thinkers who appreciate the aesthetic use of language; evaluate perspectives and evidence; and challenge ideas and interpretations. The Literature ATAR course explores how literary texts construct representations, shape perceptions of the world and enable us to enter other worlds of the imagination. In this subject, students actively participate in the dialogue of literary analysis and the creation of imaginative and analytical texts in a range of modes, media and forms.

Students taking the ATLIT pathway will sit formal exams, and a mandatory external WACE exam, unless eligible for exemption from SCASA.

Minimum Entry Requirements: C grade in AEENG or AELIT

Further Study

University and TAFE courses

Additional Requirements Time:

Students are expected to devote sufficient time to the study of English Literature to achieve good results, and must be willing to undertake extensive reading in order to fulfil the requirements of the course.

ATAR ENGLISH – YEAR 12

Course Code: ATENG

University Pathway

Cost \$90

Textbooks are provided

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 or AELIT

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.

Students are encouraged to buy own copies of texts studied.

HEALTH & PHYSICAL EDUCATION LEARNING AREA

Year 12 – 2018 Pathways

Health & Physical Education Studies contribute to the development of 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 VET courses are offered in a two year rotation

Course Name	ATAR		VET / General	
	2017 Year 11	2018 Year 12	2017 Year 11	2018 Year 12
Cricket Studies & Netball Studies	SIS30115 Certificate III in Sport & Recreation			
Health Studies	AEHEA	ATHEA	GEHEA	GTHEA
Outdoor Education	SIS20213 Certificate II in Sport & Recreation (Outdoor Education)			
Physical Ed Studies	AEPES	ATPES	SIS20313 Certificate II in Sport & Recreation	

CRICKET STUDIES – YEAR 12

SIS30115 CERTIFICATE III IN SPORT & RECREATION

Course Code: C3CRI

Vocational 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 TAFE courses

NETBALL ACADEMY – YEAR 12

SIS30115 CERTIFICATE III IN SPORT & RECREATION

Course Code: C3NET

Vocational 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.

Minimum Entry Requirements:

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

Further Study: University and TAFE courses

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 TAFE courses

GENERAL HEALTH STUDIES – YEAR 12

Course Code: GTHEA

Vocational 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

OUTDOOR EDUCATION – YEAR 12 SIS20213 CERTIFICATE II IN OUTDOOR RECREATION

Course Code: C2OUT

Vocational Pathway

Cost: \$300*

****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. In order to achieve the full qualification students will need to remain enrolled for two years.

Course Outline

Through a number of practical activities, students will have the opportunity to demonstrate their ability to apply their knowledge and skills in a variety of settings. The context of these activities include:

- Abseiling
- Rock Climbing
- Bushwalking
- Navigation
- Canoeing

A 'period zero' or 'period six' may be incorporated to maximise the time spent doing some of these activities. Time off in lieu will be given to the students to reimburse them for their extra time spent at school.

Students will participate in a three day camp in term three. Here they will put into practice what they have learned over the course of the year. Camp costs are included in the fees. This covers travel, accommodation and the hire of any facilities or equipment for activities. Students will also complete an Apply First Aid module which provides them with a Senior First Aid qualification equivalent. This cost is included in the fees for the course.

Minimum Entry Requirements

Must have been enrolled in Year 11 (continuing enrolment)

Further Study

University and/or 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 AEPES, AEHBS

Further Study

University and/or TAFE courses

SIS20313 CERTIFICATE II IN SPORT AND RECREATION – YEAR 12

Course Code: C2SPO

Vocational Pathway

Cost: \$150*

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

Course Outline

This program will be based around a workplace/recreational/sport environment. Through real life activities students will have the opportunity to demonstrate their ability to apply their knowledge and skills. The activities include participating in, preparing and conducting sport and recreation activities, such as Basketball, Tennis, Rugby League, Squash, Netball and Tenpin Bowling. In addition, students will gain an understanding of occupational health and safety policies as well as first aid skills.

Students will complete an Apply First Aid module which provides them with a Senior First Aid qualification equivalent. The cost of this is included in the fees for the course. This qualification provides the skills and knowledge for an individual wishing to enter the sport and recreation industry in coaching roles as well as assistant roles at fitness centers, aquatic centers and sporting complexes.

Minimum Entry Requirements

Must have been enrolled in Certificate II in Sport & Recreation in Year 11 (continuing enrolment).

Further Study

University and/or TAFE courses

HUMANITIES & SOCIAL SCIENCES LEARNING AREA

Year 12 – 2018 Pathways

Course Name	ATAR		VET / General	
	2017 Year 11	2018 Year 12	2017 Year 11	2018 Year 12
Geography	AEGEO	ATGEO		
Modern History	AEHIM	ATHIM		
Ancient History			GEHIA	GTHIA
Career And Enterprise			GECAE	GTCAE
Workplace Learning			ADWPL WORKPLACE LEARNING <i>*selected as a 7th course</i>	

*All VET students will be enrolled in ADWPL. A minimum of one 55 hour work placement must 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.

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 courses

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/or 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.

Some topics that maybe covered are: Ancient Greek, Persian and Egyptian History.

Minimum Entrance Requirements

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

GENERAL CAREER AND ENTERPRISE

Course Code: GTCAE

Vocational 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.

Work, training and learning experiences provide opportunities to extend students' knowledge and skills in anticipation of responding to change and maintaining an edge. These experiences are documented in career portfolios, using an increasing range of information technology skills.

Minimum Entrance Requirements:

Pre-Requisites: None required, however it is recommended that students have attained a minimum Year 10 'C' grade for English and HASS.

AUTHORITY DEVELOPED WORKPLACE LEARNING – YEAR 12 (ENDORSED PROGRAM)

Course Code: ADWPL

Vocational Pathway

Cost: \$30

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.

It is expected that all VET pathway students will enrol in ADWPL as a 7th course (endorsed program)

Minimum Entrance Requirements:

Pre-Requisites: None

MATHEMATICS LEARNING AREA

Year 12 – 2018 Pathways

Course Name	VET / General	ATAR
Mathematics Specialist		ATMAS
Mathematics Methods		ATMAM
Mathematics Applications		ATMAA
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: \$50 - plus textbooks approximately \$80

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 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

The Cartesian form of complex numbers was introduced in Unit 2, and in Unit 3, the study of complex numbers is extended to the polar form. The study of functions and techniques of calculus begun in the Mathematics Methods ATAR course is extended and utilised in the sketching of graphs and the solution of problems involving integration. The study of vectors begun in Unit 1, which focused on vectors in one- and two-dimensional space, is extended in Unit 3 to three-dimensional vectors, vector equations and vector calculus, with the latter building on students' knowledge of calculus from the Mathematics Methods ATAR course. Cartesian and vector equations, together with equations of planes, enables students to solve geometric problems and to solve problems involving motion in three-dimensional space.

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

In this unit, the study of differentiation and integration of functions is continued, and the techniques developed from this and previous topics in calculus are applied to the area of simple differential equations, in particular in biology and kinematics. These topics serve to demonstrate the applicability of the mathematics learnt throughout this course. Also in this unit, all of the students' previous experience in statistics is drawn together in the study of the distribution of sample means. This is a topic that demonstrates the utility and power of statistics.

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 calculator

ATAR MATHEMATICAL METHODS - YEAR 12

Course Code: ATMAM

University Pathway

Cost: \$50 - plus textbooks approximately \$80

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 will have to obtain a Casio Classpad calculator

ATAR MATHEMATICS APPLICATIONS – YEAR 12

Course Code: ATMAA

University Pathway

Cost: \$50 - plus Textbooks approximately \$80

Must have a Casio Classpad2 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 will have to obtain a Casio Classpad calculator

GENERAL MATHEMATICS ESSENTIALS - YEAR 12

Course Code: GTMAE

This is a non-ATAR Course

Vocational Pathway

Cost: \$50 - plus Textbooks approximately \$80

Must have a Casio Classpad2 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 – 2018 Pathways

Course Name	VET / General	ATAR
Biology		ATBLY
Chemistry		ATCHE
Human Biological Studies		ATHBY
Physics		ATPHY
Integrated Science	GTISC	

BIOLOGY (ATAR) - UNIT 3 AND 4 - YEAR 12

COURSE CODE: ATBLY

University Pathway

Cost: \$50 - plus textbooks approximately \$120

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 developed 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

Focuses on inheritance. Students are investigating the biochemical and cellular systems and processes involved in the transmission of genetic material. 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. Those patterns will then be used to explore the occurrence, distribution and inheritance of genetic disorders.

Unit 4

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:

'C' grade or better in Year 11 ATAR Biology

Further Study

University biological science studies

CHEMISTRY (ATAR) – UNIT 3 AND 4 - YEAR 12

COURSE CODE: ATCHE

University Pathway

Cost: \$50 - plus textbooks approximately \$130

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:

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

Further Study:

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



HUMAN BIOLOGY STUDIES (ATAR) - YEAR 12

COURSE CODE: ATHBY

University Pathway

Cost \$50 - plus new textbooks approximate costs \$130

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 by collecting 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:

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

Further Study

Medical and Paramedical, Laboratory Technician, Childcare, Science Education

PHYSICS (ATAR) - UNIT 3 AND UNIT 4 - YEAR 12

Course Code: ATPHY

University Pathway

Cost: \$50 - plus textbooks approximately \$130

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, in addition to the numeracy skills they have developed through the Science Inquiry Skills strand of the Science curriculum.

Minimum Entrance Requirements:

C grade or better in Year 11 ATAR Physics

Further Study:

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

INTEGRATED SCIENCE (GENERAL) - UNIT 3 AND 4 - YEAR 12

COURSE CODE: GTISC

Vocational Pathway

Cost: \$70

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:

Satisfactory achievement or better in Year 11 Integrated Science General course.

Further Study

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

TECHNOLOGIES

COMPUTING AND BUSINESS EDUCATION

Year 12 – 2018 Pathways

Course Name	ATAR	VET / General
Applied Information Technology		GTAIT
Certificate in Business		BSB20115 Certificate II in Business
Certificate in Information Technology		ICA20115 / ICA30115 Certificate II and III in Information Technology
Computer Science	ATCSC	GTCSC

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

GENERAL APPLIED INFORMATION TECHNOLOGY – YEAR 12

Course Code: GTAIT

Vocational Pathway

Cost: \$60

Course Outline

Life is changing daily. The way we do things, the way we live, the things we buy, the way we go about working and what we do at work. It's all changing. Why? Computer technology is forcing the changes. Information and Communications Technology (ICT) is forcing the majority of the changes. People are inventing new and more efficient ways to use computerised ICT. It's important then, to learn the skills of computers and ICT so that major decisions and opportunities of the future can be maximised.

The Applied Information Technology course will consist of two units of Media information & communication technologies and Digital technologies in business.

Unit 3 – Media information and communication technologies

The emphasis of this unit is on the use of digital technologies to create and manipulate digital media. Students use a range of applications to create visual and audio communications. They examine trends in digital media transmissions and implications arising from the use of these technologies.

Unit 4 – Digital technologies in business

The emphasis of this unit is on the skills, principles and practices associated with various types of documents and communications. Students identify the components and configuration of networks to meet the needs of a business. Students design digital solutions for clients, being mindful of the various impacts of technologies within legal, ethical and social boundaries.

Minimum Entrance Requirements:

None

Further Study:

Diploma in Information and Communications Technology

BSB20115 CERTIFICATE II IN BUSINESS – YEAR 12

(Two Year course)

Course Code C2BUS

Vocational Pathway

Cost: \$60



Students will complete a variety of competencies related to Certificate II in Business. Students will be learning the required skills in the Student Model Office where they complete training competencies in a simulated work environment

This work in the simulated office environment is generated by staff and provides students with the opportunity to develop basic business skills (with guidance), build confidence in an office environment and increase employment and further training opportunities at the end of Year 12 in the business industry. Students have used their skills in projects such as the Year 12 ball tickets and chaplain's dinner tickets and menu.

Students who are signed-off as competent in these training competencies will have this accreditation **nationally** recognized. It is envisaged that students completing this course over the two years will have the opportunity to complete the full Certificate II in Business.

The units being studied for this qualification are critical for all young people in the work place and can therefore relate to any industry area students are interested in pursuing once they leave school. Some of the competencies covered will be:

- Contribute to the health and safety of self and others.
- Communicate electronically
- Deliver a service to customers
- Use business technology
- Communicate in the workplace
- Create and use spreadsheets
- Develop and use a personal budget
- Organise daily work activities
- Communicate in the workplace
- Produce simple word processed documents
- Work effectively in a business environment

Minimum Entrance Requirements:

None

Further study:

TAFE Certificate III, IV, Diploma or employment in the following areas:

- Administration Assistant
- Clerical Worker
- Data Entry Operator
- Information Desk Clerk
- Office Junior Receptionist

ICA20115 / ICA30115

CERTIFICATE II & III INFORMATION TECHNOLOGY - YEAR 12

(Two Year course)

Course Code: C2ICT

Vocational Pathway

Cost: \$50

This qualification provides the foundation ICT skills and knowledge for an individual to be an effective ICT user or employee. The qualification has a fundamental ICT knowledge and skills base which is pivotal for all other qualifications in ICA11. The 8 core units contain those basic ICT skills and knowledge required for effective entry into all ICA11 qualifications from Certificate IV upwards.

To attain the **ICA2011 Certificate II in Information Technology** 14 units must be achieved:

- 8 core units; plus
- 6 electives units

Some of the key concepts which will be covered include:

- Operating a Computer Hardware
- Operating a Computer Packages
- Working effectively in an IT environment
- Installing software applications
- connecting hardware peripherals

Minimum entrance requirements:

Student should have been enrolled in ICA20111 in Year 11

Students will have the opportunity to complete Certificate III in Year 12 if they have completed the required competencies 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;

COMPUTER SCIENCE (ATAR) – YEAR 12

University Pathway

Course Code: ATCSC

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, 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.

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, run concurrently over the whole year- Design and Development of computer-based systems and database solutions and Design and Development of communication systems and software solutions.

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

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.

COMPUTER SCIENCE (GENERAL) – YEAR 12

Vocational Pathway

Course Code: GTCSC

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 (GEAIT) unit in Year 11.

Further study: TAFE studies.

No additional requirements.

TECHNOLOGIES

DESIGN & TECHNOLOGY

Year 12 – 2018 Pathways

Course Name	VET / General
Certificate II in Automotive Vocational Preparation	AUR20712
Certificate II in Construction Pathways	CPC20211
Certificate II in Engineering Pathways	MEM20413
Materials, Design and Technology (WOOD)	GTMDTW

AUTOMOTIVE – YEAR 12

AUR20712 CERTIFICATE II IN AUTOMOTIVE VOCATIONAL PREPARATION

Course Code: C2AUTO

Vocational Pathway

Cost: \$80

This certificate 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.

To complete the Certificate II in Automotive you must demonstrate competence across thirteen Units of Competence.

Assessment:

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

Further Study and Career Opportunities

Mechanic's Assistant. Completion of Certificate 2 in Automotive provides entry-level studies for the automotive industry. The certificate provides students with immediate knowledge and skills enhancing employment prospects.

Pre-Requisites:

Students should have been enrolled in AUR20712 in Year 11 (continuing enrolment)

CONSTRUCTION

CPC20211 CERTIFICATE II IN CONSTRUCTION PATHWAYS – YEAR 12

Course Code: C2CONS

Vocational Pathway

Cost: \$80

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: -

The Certificate II in Construction Pathways is recognized as a pre- apprenticeship qualification for students wanting to enter careers in the building trades, such as bricklaying, roof carpentry, tiling & plastering.

Pre-Requisites

Students should have been enrolled in CPC20211 in 2016 Year 11(continuing enrolment)



ENGINEERING STUDIES: MEM20413 CERTIFICATE II IN ENGINEERING PATHWAYS – YEAR 12

Course Code: C2ENG

Vocational Pathway

Cost: \$80

This course qualifies students for employment in the engineering production and welding industry. Successful completion of this course will provide students with transferable skills and outcomes (credits) into their apprenticeship, if applicable.

Major Study Areas:

- Hand & power tools
- Safe work practices / OHS
- Produce engineering drawings
- Basic machining skills

Further Study and Career Opportunities:

Pre-Requisites: Students should have been enrolled in MEM20413 in Year 11

GENERAL WOOD TECHNOLOGY: MATERIALS DESIGN TECHNOLOGY (WOOD)

Course Code: GTMDTW

Vocational Pathway

Cost: \$80 (plus supplying recycled timber to produce major project)

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 thicknesser, 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: None

TECHNOLOGIES

HOME ECONOMICS

Year 12 - 2018 Pathways

Course Name	VET / General
Community Services	CHC22015 Certificate II in Community Services
Food Science & Technology	GTFST GENERAL COURSE
Hospitality	SIT20316 Certificate II in Hospitality

All the 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: C2COMM

Vocational Pathway

Cost: \$80

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. These services often complement those provided by family members and volunteers. 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.

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, assisting at Beldon Primary School Stephanie Alexander Kitchen Garden Program, running activities for Year 7 students, 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 following units of competency successfully completed.

Core Units

- CHCCOM001 Provide first point of contact
- CHCCOM005 Communicate and work in health or community services
- CHCDIV001 Work with diverse people
- HLTWHS001 Participate in workplace health and safety
- BSBWOR202 Organise and complete daily work activities

Elective Units

- HLTAID002 Provide basic emergency life support
- FSKDIG003 Use digital technology for routine workplace tasks
- CHCDIS007 Facilitate the empowerment of people with disability
- CHCYTH301E Work effectively with young people

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

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

In the Food Science and Technology General course, students develop their interests and skills through the design, production and management of food-related tasks. They extend their knowledge of the sensory, physical, chemical and functional properties of food and apply these in practical situations. Students explore innovations in science and technology and changing consumer demands. New and emerging foods encourage the design, development and marketing of a range of products, services and systems.

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

SIT20316 CERTIFICATE II HOSPITALITY – YEAR 12

Course Code: C2HOSP

Vocational Pathway

Cost: \$110*

**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. The course is highly practical and students will participate in food preparation, varied activities, and cater many functions, the highlight being The Annual Chaplain's Dinner.

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.

Core Units

BSBWOR203	Work effectively with others
SITHIND002	Source and use information on the hospitality industry
SITHIND003	Use hospitality skills effectively
SITXCOM002	Show social and cultural sensitivity
SITXCCS003	Interact with customers
SITXWHS001	Participate in safe work practices

Elective Units

SITXFSA001	Use hygienic practices for food safety
SITHCCC003	Prepare sandwiches
BSBITU201	Produce simple word processed documents
BSBCMM201	Communicate in the workplace
SITHFAB004	Prepare and serve non-alcoholic beverages
SITHFAB005	Prepare and serve espresso coffee

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

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