

# **Curriculum Handbook 2014**



## **Our Vision**

**At UCSSC Lake Ginninderra we have a commitment to excellence in education that provides students with the skills and enthusiasm for a life of learning.**

### **Our college community values**

- **a responsibility for one's own learning;**
- **skills that foster lifelong development;**
- **respect for the individual and oneself;**
- **taking responsibility for oneself and others;**
- **a commitment to success; and learning and working with others.**

University of Canberra Senior Secondary College, Lake Ginninderra works in partnership with students, parents, teachers and the community to provide a high quality, challenging, relevant and engaging educational program.



# Index and List of Courses 2014

Title Page	1
Vision Statement	3
List of Courses	5
ACT Secondary System	6
Deciding What to Study	8
Assessment Policies	10
Vocational Programs	12

## COURSES

### Applied Studies

Food for Life A	16
Hospitality A/V	17
Tourism and Event Management A/V	18

### Arts – Visual and Performing

Drama A/T	20
Fashion Design and Textiles A/T	22
Media A/T	23
Music A/T	24
Music Industry C	25
Photography A/T	26
Visual Art A/T	27

### Commerce, Legal Studies and Social Sciences

Accounting A/T	30
Business A/T	31
Economics T	32
Geography A/T	32
History A/T	33
Legal Studies A/T	34
Psychology A/T	35
Social and Community Work A/V	36
Sociology A/T	37

### Design

Design and Graphics A/T	40
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### English and English as a Second Language

English A	44
English T	46
ESL A/T	48

### Industrial Technology

Automotive Technology A/V	50
Furniture Construction A/V	51
Metal Engineering C	52

### Information Communication Technologies

Business (Office) Administration A/V	54
Information Technology A/T/V	55

### International Studies

Global Studies A/T	58
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### Languages

60

*Offered at beginner, continuing and advanced levels*

Chinese T	
French A/T	
Italian A/T	
Japanese A/T	
Spanish A/T	

### Mathematics

Mathematical Applications T	62
Mathematical Methods T	62
Specialist Mathematics T	63
General Mathematics A	64

### Physical Education and Outdoor Education

Exercise Science T	66
Physical Education A	67
Sport Fitness and Administration A/V	68
Sports Studies T	69
Outdoor Education A/T/V	72

### Science

Biology T	76
Chemistry T	78
Physics T	80
General Science T	82
Science A	83

### Special Programs

Adventure Plus	86
Elite Sports	87
Excellence	88
Global Classroom	89
AFL Academy	90

### Codes

**T** = Suitable for university entrance requirements  
**A** = General course for Year 12 certificate completion  
**V** = National Vocational Certification  
**C** = National Vocational Certification only

# The ACT Senior Secondary System

## THE ACT SENIOR SECONDARY SYSTEM

ACT secondary colleges and non-government schools participate in the ACT senior secondary system.

Course accreditation, assessment procedures and certification programs take place under the authority and guidance of the ACT Board of Senior Secondary Studies (BSSS).

The Board's role is to develop policy and procedures relevant to Year 11/12 studies in the ACT.

The Office of the Board monitors developments in assessment and supervises the production of the system certificates. The Board and the BSSS Section are in continuous contact with other education authorities and ACT certificates enjoy full acceptance by all major university admission authorities both here and overseas and other Registered Training Organisations.

## COURSE DEVELOPMENT AND ACCREDITATION

ACT Colleges develop their own curriculum within guidelines set by the BSSS. The Board accredits A, T, M, C and V courses, and places R, E and H courses approved by each College Board, on a public Register.

## UNITS and COURSES

### Unit

A unit is a combination of lessons, assignments, excursions, tests, etc., organised around a particular theme or within a particular subject and taken over a specified period.

A **Standard Unit** has a value of 1.0 and is required to be delivered for a

minimum of 55 hours over one semester. Students may be awarded a **Half Standard Unit**, value 0.5, in a course instead of a standard unit if they enter or leave a course half way through a semester, are on College approved leave, or do not qualify for a standard unit because of poor attendance or non-submission of assessment items.

### Course

A course is a combination of units with cohesion of purpose. At UCSSC Lake Ginninderra, most A, T and V courses consist of either semester units of 3 lessons per week (value 1.0) or half-semester units (value 0.5). R units may be of shorter duration.

### Course Levels

**Minor course** - a minimum of 2 standard units (minimum of 110 hours of structured education program (SEP)).

**Major course** - a minimum of 3.5 standard units (minimum of 220 hours of SEP).

**Major Minor course** - a minimum of 5.5 standard units (minimum of 330 hours of SEP).

**Double Major course** - a minimum of 7 standard units (minimum of 400 hours of SEP).

### COURSE TYPES

**A course** – an accredited course considered by the Board of Senior Secondary Studies to be educationally sound and appropriate for students studying in Year 11 and 12.

**C course** - a competency based Vocational course delivered at college

**T course** - an accredited course considered by the Board of Senior Secondary Studies to provide a good preparation for higher education. In considering T classification of a course, specific consideration is given to course content, presentation and methods of assessment.

**H course** - offered by a tertiary institution to college students

**V course** - uses a combination of college education and on-the job training in the workplace to deliver nationally recognised vocational qualifications.

**R courses/ unit** - provides appropriate learning for students in Years 11 and 12, usually in the form of personal development, recreational or community service activities.

## CHOOSING YOUR COURSES AT COLLEGE

The decision to choose particular courses should be a cooperative venture involving the student, parents, teachers at high school, members of the Student Services Team and teachers at UCSSC Lake Ginninderra. You should consider the following when making course choices:

- your interests
- your abilities
- what you want to do after college
- what courses are available

Study at college is very demanding and you should also take this into account when choosing courses and levels of study. Other matters you need to consider are tertiary entrance requirements, TAFE requirements, apprenticeship procedures and employer expectations.

# The ACT Senior Secondary System

The Careers Advisers and other members of the Student Services and Student Programs Team will provide assistance to students and parents in making decisions about courses and units of study.

**Students should enrol with the aim of completing the equivalent of five courses over four semesters.**

Some students, such as those at the AIS, may take three years or more. Students undertaking a heavier workload can complete graduation requirements in less than 4 semesters.

## THE YEAR 12 CERTIFICATE

A standard student will qualify for the award of the ACT Year 12 Certificate on completion of an educational program which includes studies accruing at least 17 standard units value.

Students are required to complete a minimum of 3 T and/or A minor courses in their program. One C or E course may be counted in place of a T or A course.

## THE T PACKAGE

Students requiring a Australian Tertiary Admissions Rank (ATAR) for admission to university need to choose a particular arrangement of courses and sit the ACT Scaling Test (AST) to complete the T Package.

A standard T student must complete studies that accrue a minimum of:

- the equivalent of **20 standard units** value, which must include at least the equivalent of 18 A/T standard units, which must include at least the equivalent of **12.5 'T' standard units**.

The units must be arranged into **courses** to form at least the following patterns:

- **four majors and one minor**, or
- **three majors and three minors**; and
- **at least three major courses and one minor course must be 'T'**.

Students must sit for the **ACT Scaling Test (AST)**.

## Australian Tertiary Admissions Rank (ATAR)

The completion of a T package does not guarantee entry to tertiary institutions. Entry is mainly dependent upon achieving a satisfactory Aggregate Score from which an ATAR is calculated.

## The Aggregate Score

Is the sum of the scores in the best three T major courses and 0.6 of the score in the next best T course, major or minor. It is used to calculate a student's ATAR.

This is reported on the Tertiary Entrance Statement which, for T qualified students, accompanies the Year 12 Certificate.

## SELECTING UNITS FOR YOUR 1st SEMESTER

When selecting your units, you are advised to consider your career aspirations, abilities and interests.

You should also note the following college advice:

- Students are expected to enrol in **at least five units per semester** that is approximately 19 hours of class contact time per week. This

ensures that you can accumulate 20 standard units by the end of 4 semesters at college.

- Students are advised to enrol in a **balanced academic program**.
  - Students are strongly encouraged to complete **at least a minor in English and Mathematics** during their two years at college.
  - Students intending to enrol in more than 5 T courses should consider having one of these at **A, V or R level**. This is to help to keep homework loads to a reasonable level.
  - If a student does not have a career focus requiring T courses, (s)he will generally be encouraged to study **at least one V course** or another vocationally relevant course.
  - **No course is compulsory** or all courses are 'elective'.
  - Students are actively encouraged to study **R units** when available
  - All courses are equally available and relevant to the needs of both male and female students. Consideration of **gender stereotypes** are not relevant to your course selections.
  - Students aiming for tertiary studies should be aware of **current tertiary course prerequisites**.
  - Students need to be aware of the **requirements of employers**. Most employers expect students to have studied both English and Mathematics.
- Your initial choices can be changed.**

# Deciding What To Study

## Course Selection Information

It is important that all new students attend one of the two Course Selection Evenings for an individual enrolment interview.

It is important that you begin to plan the package of subjects that you would like to study.

During the course selection interview you will have the opportunity to discuss in detail with our staff, the different subjects and subject levels.

These discussions and your own research will help you to complete the selection process.

### Important information

- All Year 11 students are required to do a minimum of 5 courses. The pattern of your 'T', 'A', 'V', 'C', 'H' and 'R' courses will depend on your individual goals.
- You may amend these course choices after your enrolment interview with course advisers from UCSSC Lake Ginninderra.
- 'T' course – provides a good preparation for higher education. Students who wish to go to university must have at least three majors and one minor in T courses. Some CIT courses require T majors.
- 'A' course – educationally sound and appropriate for students studying in Year 11 and 12. These courses give students skills that are useful in the world beyond college including work, traineeships or some study programs at CIT.
- 'V' course – deliver nationally recognised vocational qualifications and can use a combination of school based and on the job training in the work place.
- 'R' course/units – provides appropriate learning for students in year 11 and 12, usually in the form of personal development, recreation or community service activities. These units cannot contribute minors or majors to the minimum requirements of the ACT Year 12 Certificate.
- 'C' course - competency based only vocational education and training programs appropriate for students in Year 11 and 12, which are delivered and assessed by Registered Training Organisations such as colleges.

### Questions you should to consider

- Will you be seeking a T package and an ATAR at the end of Year 12?
- Are you looking to study at CIT at end of Year 12?
- Do you want to get a job or a traineeship at the end of Year 12?
- What was your performance in year 10 like?
- What level of study are you able to cope with?
- Are your goals realistic?

# Deciding What To Study

## Planning Your Future

Do you intend to complete a T package?

No                      Not Sure                      Yes

Do you intend to complete a Vocational (V) course as part of your year 12 Certificate?

No                      Not Sure                      Yes

List three career areas of possible interest to you:

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What prerequisites/assumed knowledge will you need for these?

*(Check with your Careers Adviser or Year Coordinator)*

English                      Yes                       No

.....

Mathematics                      Yes                       No

.....

Science                      Yes                       No

.....

Vocational Certificates Yes                       No

*Including Australian School Based Apprenticeships (ASBA)*

.....

Portfolio of Work                      Yes                       No

*(Such as creative work for Art or Film School)*

.....

Other                      Yes                       No

.....

## Course Selection

It is important that you begin to plan the package of subjects that you would like to study in college.

After accepting a place at the college you will be invited to a **Course Selection Evening**. You will then have the opportunity to discuss in detail with our staff, the different subjects and subject levels.

All year 11 students must take a minimum of 5 courses. Select 5 first choice courses and 2 spare courses (not registered units) and list them in order of preference below.

You may amend these course choices after your enrolment interview at the Course Selection Evening in consultation with Student Services at the college.

Think carefully about your choices, taking care to make sure the courses you choose reflect your interests, abilities and future career aspirations.

English and Mathematics are recommended for all students.

### I would like to study these courses in 2013

Course 1 \_\_\_\_\_

Course 2 \_\_\_\_\_

Course 3 \_\_\_\_\_

Course 4 \_\_\_\_\_

Course 5 \_\_\_\_\_

Please choose two spare courses in case any of your first choices are not available.

Spare Course 1 \_\_\_\_\_

Spare Course 2 \_\_\_\_\_

***Please consider these choices prior to your course selection interview.***

# Assessment Policies

## Assessment Policies

Further information on assessment policies can be found on the BSSS website <http://www.bsss.act.edu.au>

### Late Submission of Work

In accordance with BSSS guidelines work submitted late will be penalised at the rate of 5% (of possible marks) per calendar day late (including weekends and public holidays) to a maximum of 35% of the total available marks. Submission after the 7<sup>th</sup> late day will be awarded a notional zero. A notional zero is a mark calculated by the teacher at the end of the unit in accordance with BSSS policy and will be lower than the lowest actual score. Work cannot be submitted on a weekend or public holiday.

**This table demonstrates the application of late penalties.**

	<i>Due Mon</i>	<i>Due Tues</i>	<i>Due Wed</i>	<i>Due Thurs</i>	<i>Due Fri</i>
<i>Received Monday</i>	0				
<i>Received Tuesday</i>	5%	0			
<i>Received Wednesday</i>	10%	5%	0		
<i>Received Thursday</i>	15%	10%	5%	0	
<i>Received Friday</i>	20%	15%	10%	5%	0
<i>Saturday</i>					
<i>Sunday</i>					
<i>Received Monday</i>	35%	30%	25%	20%	15%
<i>Received Tuesday</i>	NZ	35%	30%	25%	20%
<i>Received Wednesday</i>	NZ	NZ	35%	30%	25%
<i>Received Thursday</i>	NZ	NZ	NZ	35%	30%
<i>Received Friday</i>	NZ	NZ	NZ	NZ	35%

**(Note: NZ = Notional Zero)**

If a student is unable to hand in work on the due date, because of illness or misadventure, satisfactory documentation must be provided to support the request for due date extension (special consideration). Requests for an extension should be made to the class teacher in advance. If a student knows in advance and for good reason she/he will be unable to be present for an assessment item the class teacher must be informed as soon as possible to arrange an alternative date or assessment item.

## Assessment Tasks

If an absence from an assessment task is unavoidable, the teacher concerned should be told as soon as possible prior to the task being due.

Absence from a test requires the presentation of a medical certificate or other acceptable explanation. Tests must be taken on the scheduled day except in the case of illness, where the student is required to supply a letter from a parent/ guardian or a doctor's certificate. All extenuating circumstances will be given due consideration. (Conditions for special consideration may apply)

### Completion of Assessment

A student will be awarded a V grade in a unit where she/he, fails to submit items of assessment worth at least 70% of the assessable work without a satisfactory explanation.

## Class Attendance/V grade Policy:

It is expected that students will attend all scheduled classes/contact time/ structured learning activities for the units in which they are enrolled, unless there is due cause and adequate documentary evidence is provided. A student may be awarded a V grade in a unit where she/he misses more than 6 scheduled classes in a semester unit (or 3 in a term unit) **or similarly is more than 10 mins late in 6 scheduled classes in a semester (or 3 in a term unit)** without a satisfactory explanation.

### Plagiarism, (the copying of work in any form without acknowledgment of sources)

is a serious offence, and it is the responsibility of all students to ensure that they do not commit this breach of discipline whether intentionally or otherwise. Students may be required to substantiate or verify the authenticity or integrity of completed assignments, reports, etc. Students are therefore advised to keep all the material used in preparing their work such as notes, references, photocopied material, and drafts until the end of the semester. (Please refer to the BSSS website)

### Unit Grades

Grade descriptors provide a guide for teacher judgement of students' achievement over a unit of work in this subject. Grades are organized on an A-E basis and represent the standard at which students have worked. A-E grades are awarded on the proviso that the assessment requirements have been met.

### Appeals and Special Consideration

When an assessment item is returned to a student, the student should check the marking thoroughly. If a student wishes to have the marking of an item reviewed, she/he must firstly discuss the matter with the class teacher, who may speak to another teacher if marking was shared. If the problem is not resolved the student should then approach the relevant faculty head.

# Assessment Policies

If, after these two steps, the student remains unsatisfied with the outcome, she/he can consider a formal appeal. This should be lodged with the Deputy Principal.

A deadline for appeals may be advertised. Further advice must be sought from the Deputy Principal.

If matters beyond a student's control have seriously affected marks (extended illness or serious family upsets) it may be possible to award special consideration.

The workload in other subjects is not a cause for special consideration. Evidence will be required for a claim for special consideration. Application for special consideration should be made to Student Services.

## VOCATIONAL ASSESSMENT

Each unit of competence will be assessed independently. There will be an opportunity to be re-assessed (if required) to meet national competency standards, however the original assessment mark will be used to calculate the A-E grade.

Units of competence will be delivered as part of a comprehensive overview of industry practices and within a practical context where possible. The reporting of competencies may occur progressively or as part of an identified assessment process at the end of the unit. These will be recorded later in a student record book.

## GENERAL MODERATION PROCEDURES

### Unit results (T and A courses)

Common assessment items will be moderated across classes using techniques such as cross-marking, back scaling and standardisation processes according to the policies of the college. Unit results will be calculated as a weighted mean of the individual assessment items. These are standardised to historical parameters.

## Course Score Generation (T courses)

A course score in a T course is calculated automatically by the BSSS software using the better of :

- The average of best 80% of scores in units studied in the course.
- The average of the best 80% of scores at the point where the student completes the minimum number of units required for the course.

## CERTIFICATES AND RECORDS

### Semester Reports

Semester reports are issued for each unit detailing students' performance in that unit.

At the end of Term 1, a report on student progress is issued prior to Parent/Teacher interviews. This report indicates any areas of concern, including attendance details.

### Secondary College Record

A Secondary College Record lists all units completed, together with the grades awarded. Students leaving College before completing the requirements for a Year 12 Certificate are eligible for an SCR as a record of their studies.

### ACT Year 12 Certificate

The ACT Year 12 Certificate is awarded to those students who complete an educational program approved by the College as having provided a coherent pattern of study and which includes units with a total value of at least 17 standard units.

Students are required to complete at least 3 A and/or T minor courses in their program. Although generally awarded after two years of study, time to complete is limited to five years. Special provisions apply to Mature Age or Repeat Students. The Year 12 Certificate lists all units studied, along with grades awarded.

## Tertiary Entrance Statement (TES)

A Tertiary Entrance Statement is issued to any student who qualifies for a Year 12 Certificate and who completes a T Package. It indicates, along with numerical scores in all T courses studied, the student's Australian Tertiary Admission Rank, which is used by tertiary education bodies to determine eligibility for tertiary study.

## Australian Qualifications Framework (AQF)

Certificate I or II is issued to students in nationally recognised vocational courses who demonstrate the competency standards specified for these awards in particular areas of vocational training. Some ASbA students may be eligible for Certificate III qualifications.

## UCSSC Lake Ginninderra Student Reference

At the end of Year 12, students receive a UCSSC Lake Ginninderra Student Reference. This reference provides a range of information about the student's academic performance and participation in College life.

It supplements any Certificates or other records issued, and may be particularly useful for students seeking employment or tertiary entrance.

# Vocational Programs

## Vocational Programs

Students should consider including a vocational course in their study package. It can broaden their career outlook and provide for development in a range of skills relevant not just to one career area but to future employment in general.

Vocational Education and Training (VET) is a term used to describe education and training arrangements designed to prepare people for work or to improve the knowledge and skills of people who are already working.

It also describes one of the three major sectors of education and training, the other being school and higher education sectors.

VET programs offer students a wide range of educational experiences leading to or directly involved with work and career opportunities.

These can range from Certificate 1 through six levels of the Australian Qualifications Training Framework (AQTF) to Advanced Diplomas.

## Employment Pathways

UCSSC Lake Ginninderra provides Vocational Education and Training, which is responsive to the challenging needs of students in today's workforce.

Students can select work-based programs, which are designed to articulate into further study and assist students to obtain employment upon graduation.

These courses have been developed in partnership with industry, unions and employers.

As a nationally accredited Registered Training Organisation (RTO) the college is able to structure work-based training, which has been approved at a national level.

Students are able to graduate with full or partial VET qualifications that are recognised across Australia.

*Vocational education involves courses that:*

- are developed for students to meet the needs and standards of industry (employers)
- are competency based. That is, students demonstrate their skills in the workplace (or simulated workplace) environment
- may have a period of 'on-the-job' training with an employer
- count towards the Year 12 Certificate, have national recognition and provide pathways to further education and employment.

*Students who undertake vocational (V) courses:*

- Gain practical work related skills that employers recognise
- Gain credit transfer and/or advanced standing into other training courses
- Gain a nationally recognised vocational qualification and the internationally recognised Year 12 certificate
- Make valuable contacts with Employers
- "Try out" a career choice before finishing Year 12
- Prepare themselves for the world of work

## Vocational (V) Courses

In keeping with the national trend towards vocational training, UC SSC Lake Ginninderra has successfully established a range of vocational courses.

These incorporate nationally recognised competencies which will articulate with further training options and directly into the workforce in those areas. Successful completion of these courses can lead to a nationally recognised Certificate I or II being awarded.

Partial completion can lead to the awarding of a Statement of Attainment.

**The following vocational courses are available at the College:**

- Automotive Technology
- Business Administration
- Furniture Construction
- Hospitality
- Information Technology
- Media
- Metal Engineering
- Music Industry
- Outdoor Education
- Social and Community Work
- Sport and Recreation
- Tourism

## Recognition of Prior Learning (RPL)

If you already have experience that may be relevant to the Vocational Educational Training (VET) Program you are enrolling in, you are entitled to seek acknowledgment of this experience through the Recognition of Prior Learning process, known as "RPL".

The main focus for RPL is what you know, not how or where you learnt it. RPL recognises skills, knowledge and attitudes that you have learnt from life experience, work experience and other training/education.

RPL will identify whether your current skills and experience are similar to that required by the course that you will do.

If you apply for RPL you will be asked to supply evidence to support your application.

This evidence may include examples of relevant life experiences, work experiences, details of studies or training, and references from people who can confirm your claim.

Your VET teacher will provide both advice and print information about the steps involved in achieving RPL status.

# Vocational Programs

## Australian School Based Apprenticeships (ASBA)

When a student at school is participating in a traineeship or apprenticeship it is called an ASBA (Australian School Based Apprenticeship).

ASBA's are part-time and incorporate all the features of full-time traineeships and apprenticeships.

*They include:*

- A training agreement that is signed by both the employer and the trainee or apprentice and is approved by the Office of Training and Adult Education
- A formal training program with training delivery supported by a registered Training Organisation (RTO) that leads to a nationally recognised qualification
- Paid employment under an appropriate industrial arrangement.
- Because the trainees and apprentices are at school, their apprenticeship programs need to be flexible enough to accommodate the students' school, work and training needs.
- The time spent at school, at work and in training needs to be agreed between the employer, the student's parents/guardians, the school and the training organisation.

## Structured Workplace Learning and Vocational Placement

Structured Workplace Learning (SWL) and Vocational Placement are operated as part of the Vocational Courses program.

Students who are enrolled in a vocational course will have their SWL or Vocational Placement organised by their teacher.

Officers from this organisation visit the college and explain their role and the students' responsibilities once enrolled in the program.

Structured Workplace Learning (SWL) and Vocational Placement differ from Work Experience in that competencies contained in the vocational course are assessed 'on-the-job' during the placement.

Students are expected to complete these competencies as outlined by the course and teacher during the placement time.

Most vocational courses have a Training Record Book that outlines the requirements of the 'on-the-job' assessment.

## Work Experience (WEX)

Work Experience is operated as part of the College's Careers program under the guidelines of the Education and Training Directorate.

Most work experience placements occur in the non-teaching week/s at the end of each semester, but placements during a semester are also possible.

As a result, over the two years at college, each student has several opportunities to do work experience.

Students wishing to undertake work experience should make an application to the college's Work Experience Co-ordinator at least six weeks ahead of the time they would like their placement to occur.

Students who wish to arrange their own placement should include details of their proposed placement in this application.

To maximise the potential benefits of work experience it is recommended that students discuss their ideas for work experience with their parents and one of the College's careers advisers prior to requesting a placement.

For students under the age of eighteen, it is necessary for parents to sign the work experience application and the work experience agreement after the placement is arranged.



# Applied Studies

**Food for Life A**

This is a food preparation and meal design course incorporating basic nutrition and cultural awareness.

There is a strong practical emphasis and a focus on knowledge and skills required for everyday living.

**Course Patterns**

This course is not sequential. All units described below are semester-length (value 1.0), although each can be spilt into 0.5 units if required. The nature of each unit is indicated by its title.

**Units****Food First**

This unit recognises the significance of food in festive and social occasions. It looks at meal times and the significance on family traditions. Typical meals for breakfast, lunch, dinner, snacks and more are used to help students develop skills in the use of equipment and good preparation techniques.

**Nutrition for Life**

This unit aims to develop the skills and knowledge required to make informed choices about food throughout the life cycle. It will analyse the factors that influence food choice and provide strategies for maintaining health of all individuals.

**Food and Culture in Australia**

This unit examines the food we eat in Australia and traces the influences of the cultural groups that have contributed to our diet today. It will include study of indigenous foods, food of the first settlers and then examine the influence of migrant populations.

**Independent Living**

This unit includes time and budget management and looks at consumer issues. It examines accommodation and legal issues relevant to moving away from home for the first time. Students should develop the skills and knowledge to make good food choices on a restricted budget and to prepare nourishing food for peak performance, quickly, easily and independently.

**Food Science & Management T**

This course studies food in the contexts of nutrition, life-style, science and technology. There are no pre-requisites and individual units may be selected. The course will provide advanced transferable life skills and be of particular value for students planning careers in teaching, food technology, nutrition, dietetics, food trades, nursing, health, sport, hospitality, social work and child care.

**Course Patterns**

The units in this course are non-sequential.

**Nutritional Science**

Macro and micro nutrients in food  
Models and guidelines for food choice  
Factors affecting food selection  
Meal Planning  
Australian families and households  
Nutrition and health through the lifespan  
Meeting specific nutritional goals  
Recipe modification and development  
Current issues in nutrition

**Food and Management**

Origins and development of Australian food patterns, influences of various cultural groups  
Factors affecting food selection and consumption  
Relationships between socio-economic status, diet, life-style and health and well being  
Global resource sharing and food distribution

**Food Chemistry and Technology**

The nature of food  
Factors for assessing foods  
Composition, structure, classification of nutrients  
Physical and chemical changes occurring during food preparation

**Food Security and World Resources**

Providing a safe food supply  
Production and processing of food for Australians  
Product planning, marketing, pricing, packaging, distribution  
Impact of food manufacturing, processing, preserving, packaging and distribution technologies and practices  
Current issues in food technology  
Genetic engineering, food regulation and policy making

**Note:**

This course as with other courses will run only if a viable class is possible.

## Hospitality A/V

This course aims to provide students with appropriate skills, knowledge and attitudes that will equip them to; make informed decision on seeking a career in the hospitality industry, as well as work in the operational areas of the hospitality industry with greater confidence and expertise.

### Course Patterns

It is recommended that Year 11 students begin with the unit Hospitality Essentials. All units described below are semester-length except for the Structured Workplace Learning.

### Units Available

Hospitality Essentials (11/12)  
Hospitality Kitchen Procedures (11/12)  
Leadership in Service Operations (12)  
Café Service (12)

Structured Workplace Learning # 1 (11/12)  
Structured Workplace Learning # 2 (12)

(Unless indicated otherwise, all are semester units, value 1.0)

What's your career?

Do you want to be part of one of Australia's largest and fastest growing industries?  
Do you want a career in food and beverage; kitchen; gaming; housekeeping or front office?  
Would you prefer an alternative career path rather than going directly to university after Year 12?  
Do you want some skills to support you in employment while undertaking further study?

### Units

#### Hospitality Essentials (11/12)

This unit deals with the skills and knowledge required to access, increase and update knowledge of the hospitality industry. It also includes organising and preparing foodstuffs for the kitchen as well as WHS and workplace hygiene.

#### Hospitality Kitchen Procedures (11/12)

This unit deals with the skills and knowledge required for general food preparation techniques and methods of cookery.

It also includes the interpersonal, communication and customer service skills required by all people working in the tourism industry as well cultural diversity issues related to the industry.

## Leadership in Service Operations (Year 12)

This unit follows on from *Hospitality Essentials* and *Hospitality Kitchen Procedures* and gives students the skills and experience to simulate a café environment and operate alongside their peers at Lakeside Café. (a UCSSC Lake Ginninderra training facility).

Students rotate through food preparation and food and beverage service roles meeting the needs of a paying public.

### Café Service (12)

This unit will give students the opportunity to define customer needs and then demonstrate teamwork, menu development, costing, efficiency, supervision and evaluation of functions.

### Structured Workplace Learning (SWL)

Students who wish to achieve SIT10307 Certificate II Hospitality (Kitchen Operations) or a SIT 20207 Certificate II Hospitality in will be required to complete two SWL placements or gain Recognised Prior Learning (RPL) if already employed in the Hospitality industry. Evidence is required of 12 full service periods with realistic staff to customer ratios (1:15)

This course is aligned with the Tourism, Hospitality and Events Training Package. It is designed to provide students with the skills and attitudes required to work in the Hospitality Industry. The competencies covered are nationally recognised. The progressive achievement of SIT10207 Certificate I and SIT 20207 Certificate II Hospitality is based on the student's ability to demonstrate achievement of competencies

Students who partially complete this course will be eligible for a Statement of Attainment.

# Tourism and Event Management A/V

## Tourism and Event Management A/V

Tourism is one of Australia's largest and fastest growing industries.

The industry offers opportunities for careers in Tourist Attractions, Tour Guiding, Wholesale Tour Operations, Retail Travel, Tourist Information Services and Event Management.

Studying Tourism and Event Management can provide a career pathway alternative to university after Year 12. It can provide the skills needed for employment while undertaking further study?

### Units

#### Introduction to Tourism

This unit includes the skills and knowledge required to develop and update knowledge of the tourism industry, focusing on sourcing and providing destination information relating to tourism in Australia.

This unit also includes the interpersonal, communication and customer service skills required for selling and advising on products and services and providing visitor information.

#### Global Tourism

This unit focuses on the customer service skills required to work in a socially diverse environment as well as health, safety and security procedures.

Students will also be sourcing and providing international destination and advice as well as accessing and interpreting product information.

#### Working in Tourism

This unit includes the interpersonal, communication and customer service skills required by all people working in the tourism industry. These skills include working with colleagues and customers as well as producing word processed documents.

It also further develops the skills and knowledge required to source and provides destination information and advice to both Australia and International destinations.

#### Tourism and Events Promotion

This unit includes the skills and knowledge required to source and present information related to tourism and events promotion.

The skills and knowledge required to create a promotional display or stand is covered in this unit. Students are also required to access and interpret product infor-

mation relating to local tourism events and to operate an online information system.

#### Vocational Placement (Year 12)

This provides students with a 'real life, hands on' experience within the tourism industry and is vital for their future employment. It is not compulsory but highly recommended.

Students in Year 11 who would like to commence an ASbA (Australian School based Apprenticeship) are also encouraged to participate in a placement.

#### Vocational Certification

To achieve a Certificate II in Tourism, eleven competencies must be completed. Students who successfully complete three semesters of the Tourism course will be eligible for the Certificate II in Tourism SIT 20107. Students who only partially complete this course will be eligible for a Statement of Attainment.



# Arts Visual and Performing

# Drama A/T/R

## Drama A/T/R

Some people study Drama simply because they are fascinated by the rich complexity of an art form which is over two thousand years old. Some people study Drama because it is a subject that emphasises essential personal development and life skills.

Others see it as a subject that can make them much more valuable to a prospective employer, provide opportunities for them to become better communicators, better organisers and improve their ability to work in groups and help them to learn how to think creatively.

You might be one of those for whom an A or T Drama major or minor provides a head start in any tertiary performing or creative arts course. Drama T studies can count toward your university entrance requirements (ATAR) and your Year 12 Certificate. Drama A studies can count toward your Year 12 Certificate.

Drama R (Registered) units enable students to gain credit for being in productions without having to do any written work. You might simply decide that no Year 12 package is complete without an Arts subject!

## Course Patterns

Drama courses are offered in a non sequential order but some units are more suitable for beginners than others.

## Units

### Acting for Film and Television

Experiment with a variety of styles of acting for film and television whilst you develop imaginative and original pieces for the screen in a variety of genres. This course focuses on the movement and voice skills needed for successful performances on screen.

### Actor And Director - A prerequisite for studying The Director 1.0 and 0.5

Learn about the roles of actor and director as you study the styles and works of influential directors and theatrical practitioners. This course focuses on developing a broad understanding of a range of theatrical styles through scripted work and improvisation.

### Australian Theatre 1.0 and 0.5

Explore the rich theatrical traditions of Australia through scripted work and improvisation. Create workshopped and improvised pieces about themes and ideas that matter. This course focuses on the growth of drama and theatre in Australia since the late nineteenth century up to the present.

## The Director 1.0

This unit allows you to explore different directorial styles in order to realise performances of scripted drama. You will learn about the responsibilities of the director and acquire a practical and theoretical understanding of theatrical direction. The course "Actor and Director" is a prerequisite for studying this course.

### Dramatic Comedy 1.0 and 0.5

Comedy is an ancient form of theatre, although many of the gags are still easily recognised today. This course examines the evolution of comedy throughout the ages, the elements that make up comedy, and various comic styles through scripted drama and improvisation.

### Dramatic Explorations 1.0 and 0.5

Explore what makes a good performance in this unit. You will work individually and as an ensemble to utilise a variety of acting techniques in devised and scripted work. This course gives a broad introduction to different styles and eras of drama, and different techniques used in creating a performance.

### Experimental Theatre 1.0 and 0.5

Explore the practitioners and styles that take us out of the everyday and into the abstract, the absurd, the challenging, the political. This course examines a variety of forms of experimental theatre through scripted and devised work.

### Golden Ages of Classic Theatre 1.0

Experience some of the many forms of Western theatre, such as Greek and Roman theatre, Medieval Theatre, Elizabethan and Jacobean Theatre, and the theatre of the Nineteenth Century. Examine a variety of scripts and practical techniques as you explore how drama has developed in Western society through many ages and styles.

### Independent Unit (T Only) 1.0

Ever thought about putting on your own play? Or creating a full-scale script? Perhaps creating a sophisticated series of workshops based on a subject that you are passionate about? If you are a final semester student in Year 12 with significant experience in Drama, then this unit allows you to design and create your own project.

### Masked Performance

Masks have been used in drama for thousands of years. Masks can frighten, fascinate, symbolise and inspire. Learn to use different masks in differing shapes and styles to create theatre ranging in scope from comedy to tragedy and everywhere in between.

## Modern and Classical Tragedy 1.0 and 0.5

Tragedy is one of the best known classical forms of drama, and it still fascinates and moves today. Study the tragic archetypes from Ancient Greece and track their development through thousands of years to modern tragedies. Examine what makes a tragedy and how it reflects our ideas, values and concerns.

## Performing Shakespeare 1.0

The range of material in Shakespeare's work is huge and includes tragedy, comedy and history plays. If you are interested in performing or studying Shakespeare, this is an excellent unit of study. It makes a great complementary unit if you are studying one unit of Drama as part of your English studies.

## Realism versus Expressionism 1.0

One of the most dominant forms of drama over the last century, realism is the study of acting in a natural or realistic way. You will explore various theatrical practitioners through scripted drama and workshop activities, working individually and in small groups. Character is a focus of this unit.

## Design for the Stage 1.0 and 0.5

Drama is not only acting; there is a whole world of technology behind the scenes. In this course, examine how sets and costumes are designed for a variety of genres and environments. Learn how to create a portfolio of set and costume designs for specific scripts and how to follow and interpret the director's overall vision. This unit will be offered for study in Semester One 2009.

## Theatre for Young People 1.0

If you are interested in children's theatre and theatre in education, this course will allow you to explore both forms through a wide range of practical activities. You will research, select and devise performances suitable for an audience of children and young people.

## Sound and Light Design 1.0 and 0.5

Lighting and sound can make or break a performance and in this course you will learn how to safely rig and operate theatrical sound and lighting equipment. You will examine the different effects that lighting and sound can have on a performance and you will create lighting and sound designs for various purposes.

## Theatre Production and Performance 1.0

Develop your understanding of the various roles in the production of a play; performers, production personnel and technical support. You will have an opportunity to work both as an individual and a member of a group to produce devised and/or scripted drama.

## Voice and Movement 1.0

Voice and movement are vital dramatic tools, and this course focuses on how we use both to impart dramatic meaning. Working with the principles of physical theatre, you will work as an individual and as a member of an ensemble to perform scripted and devised works.

## Theatre Around the World 1.0

There's a whole world of different theatrical practices out there; you may have heard of theatrical forms like Noh, Kabuki, Indonesian puppetry or indigenous ritual and storytelling. This unit allows you to explore different types of drama from around the world, experimenting with skills from a variety of cultures and time periods.

## Prerequisites

There are no prerequisites for most Drama units but some units are strongly recommended for Year 12 only and enrolment is at the discretion of the Drama staff. "Actor and Director" is a prerequisite for studying "The Director".

## College Productions/Musicals

Productions are open to all students in the college. If you take part in a college production you will also be enrolled in an appropriate T, A, C or R Drama or Music unit depending on the requirements of your package. Many students doing a T package choose to do a Theatre Arts accredited minor as a way of enhancing their package or as an extension to T Drama studies. One unit of Drama may be included in an English major course. A double major in Drama T will be offered only after consultation with the faculty head.



# Fashion Design and Textiles A/T

## Fashion Design and Textiles A/T

Textiles and fashion form an integral part of our culture, history and daily lives. This course aims to provide students with a theoretical knowledge of fibre, fabric, fashion and design, as well as skill in practical application.

It is well suited to the needs of students wishing to pursue further studies and careers in the fashion industry as well as those who enjoy the opportunity to maintain an ongoing interest. Students with little or no experience will be able to achieve high levels of success and produce work that challenges them individually.

The courses cover both garment construction as well as Interior decoration giving students the opportunity to experience a variety of design fields. Classes are a mixture of students studying A/T.

### Course Patterns

This course is non-sequential.  
All Semester Units are A/T.

### Units

#### Design for Fashion and Interiors

This unit is a combination of Fashion Design and Interior Decoration. Students have the opportunity to individualise their learning and either focus on the Fashion or Interior Design stream. The textiles room becomes a workshop during this unit and students have the opportunity to explore different fabric dyeing and printing techniques to apply to their practical work.

#### Fashion Design and Production

Students will explore the structure of how fashion labels and companies operate, mass production and the working environment of a Fashion Designer. This unit also explores current trends, computer technology and the rights and responsibilities of the designer. Students will research and apply fabric embellishments and decorative techniques to their practical work throughout this unit.

#### Marketing your own Designer Label

The success of any industry is largely dependent upon its marketing strategy. Marketing techniques, including advertising, will be explored in both a theoretical and practical way. This unit is designed so that students have the opportunity to simulate an understanding for the role of a Fashion Designer. They will have opportunity to develop their own fashion label and create an outfit to showcase in a fashion parade at the end of the semester.

#### Working with Fabrics

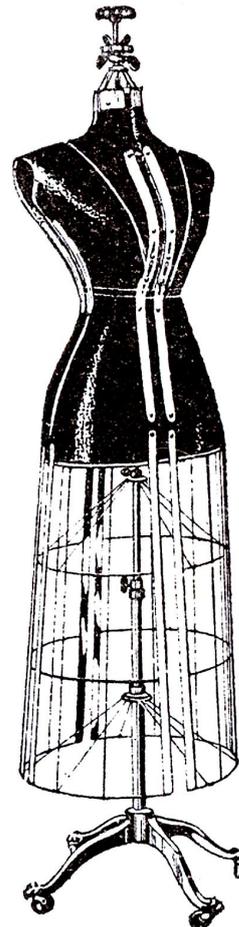
This unit focuses on the structure of fabrics and understanding of fibre properties. It allows students to individually explore design concepts to develop clothing or textile items. Student will also explore, experiment and apply fabric construction techniques to develop their technical skills.

#### Designing for Clients

During this unit students will demonstrate creativity and/or design innovative responses to client needs. The focus will emphasise analysing the role of the couture designers as well as understanding and applying psychology to fashion design and customisation.

#### Costume and Set Design

During this unit students have the opportunity to develop design ideas using musicals, dance performances, music videos and the like as inspiration for costumes and sets. Students will explore mood/ storyboards as a means of concept development, as well as creating statement pieces to be showcased in a production, fashion show or dance performance.



## Media A/T/V

Media study delves into the range of Media industries, the impact they have on our lives and society, and the techniques that are used in those industries. All Media study involves practical work as students gain more insights by trying to create their own Media products.

Media is a subject which emphasises communication skills and working with others. It also helps to improve time and resource management techniques as well as emphasising creative thinking and ingenuity.

You might be one of those for whom a Media major or minor provides a head start in any tertiary arts course. Media T studies can count toward your Year 12 Certificate and university entrance requirements. You might simply decide that no Year 12 package is complete without an Arts subject.

One media unit can be used in an English major, major minor or double major.

## Units

### Media Foundation

This is an introductory unit that focuses on crucial skills for Media analysis and a broad study of media industries and their impact on society.

### Film

The film units all involve identification of Filmic techniques and small practical projects. The units include: Film Genres and Cultures, the History and Development of Film, Film Making, Documentary and Scriptwriting.

### Sound

Sound units include: Audio Communication and Radio.

### Television

The following units involve an analysis of different formats and formulas and a critique of the industry and its influence on society: Television and Television Genre.

### Video Production

Students learn the basics of camera language, editing techniques, lighting and sound and the range of media industry uses of video production.

### Process to Production

Students negotiate with the teacher to do a large scale project, from design through to the final product, that is very near professional in quality.

## Animation

Students will study the history of animation techniques, consider the application of animation in a range of media industries and improve their computer skills with at least one major production.

## Journalism

A range of topics may be covered in the Journalism, News and Current Affairs and Journalism Genre units. These topics may include Broadcast Journalism, Print Journalism, Sports Journalism and Television Journalism.

## Interactive Media

Students explore multimedia elements such as text, graphics, image, 3D elements, video and sound, as well as a range of interactive platforms and multimedia organisations.

## Popular Culture

This unit explores the definition of popular culture and explores the range of media industries that contribute to the creation of popular culture through image manipulation and marketing.

## Vocational Certification

In order to meet the hours required to attain the Certificate II in Creative Industries Media it is expected that students will undertake a work experience placement in Media industry.



# Music A/T

## Music A/T

Students have access to both acoustic and electronic instruments, or can choose to use their own equipment. Students in all courses have an opportunity to create, perform and record their own compositions in the music studios.

Students have many opportunities to perform at college in activities such as Arts Night, Lake Idol, Focus Weeks, Open Night, Graduation, the College Musical, etc. as well as outside the college at competitions and concerts organised by other organisations.

## T Strand

This course assumes students have a formal knowledge of music notation, developed literacy and performance skills and a general knowledge of some musical styles.

It is designed to accommodate levels from Grade 3 (AMEB, Trinity, or equivalent) and upward. The course provides a wide range of activities and students will improve their knowledge and skills in all areas of music including performing solo and in a group, improvising, composing, arranging, and appraising.

Eight semester-length 'T' units are available, allowing students to complete a minor, major, major minor or double major during their two years at college.

## A Strand

Designed for students wishing to develop their knowledge and skills in music. All levels of instrumental players are welcome, however some basic knowledge of music and instrumental experience is an advantage.

This course is mostly practical with students being given the opportunity to play their instrument individually and in a group.

Some music reading and writing work will allow students to compose their own music. There are no compulsory units in this course and students have many opportunities to join the program.

## Units

Units are chosen from the following streams:

### Classical stream

Medieval  
Baroque  
Classical  
Romantic  
20th/21st Century Music

## Jazz stream

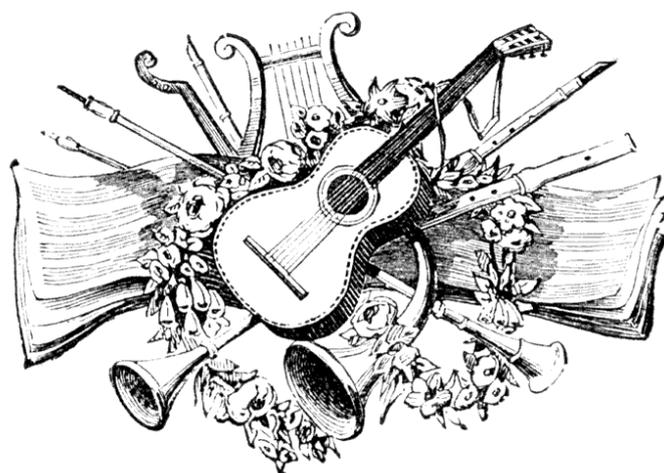
Jazz Perspectives  
Blues  
Swing and Bebop  
Latin, Funk  
Cool and Beyond

## Contemporary/Cultural stream

Rock and Pop  
Australian Music  
Women in Music  
World Music, Ensembles  
Music for Film  
Music and the Media  
Music for Theatre

## Registered Units

Ideal for students who want to improve their performance skills. Students have the opportunity to perform as an ensemble.



# Music Industry

## Music Industry

### Music Industry C Course

CUS20109 Certificate II in Music

This course is designed for students interested in the music industry. It focuses on the fundamental skills and underpinning knowledge to pursue further training and work in a range of music areas.

The course at the College concentrates on the underpinning knowledge required for work in the music industry. Students learn skills which should assist them in performance, sound engineering and management within the music industry.

To attain a Certificate II qualification, students must be deemed competent in three core units, three specialist units, and two elective units. Students must also complete one Structured Workplace Learning placements in the music industry.

Students who successfully meet the requirements for the vocational units of competence embedded in the course will receive a Statement of Attainment for the units of competence they have achieved.

### Course Pattern

There are no compulsory or prerequisite units in this course. The units are sequential although there is opportunity for students to enter the course at any stage of Years 11 and 12.

### Units

#### Breaking into the Music Industry

This unit focuses on an introduction to OH&S issues specific to the music industry, working effectively with others, developing and applying creative arts industry knowledge, audio/sound engineering, music literacy and performing. It introduces the student to the industry in which they will be completing work placement and provides valuable insight into the range of jobs in the Music Industry.

#### Recording on Both Sides of the Glass

This unit introduces students to recording in music studios. Students participate in the design, recording, composing and performances for developing a CD for production. This unit concentrates on specialist competencies that can be utilised in a live or studio recording setting.

#### Earning Your Way in the Music Industry

This unit focuses on working as a musician, composer, manager and other roles within the Music Industry. It introduces students to employment opportunities and

obligations, requirements and contacts with various sectors. Students also look at music cultures and appropriate repertoire depending on the venue and culture of the audience.

### Headlining the Gig

In this unit students participate in the design, production and implementation of a major concert/gig. This provides them with a simulated experience within the college setting which may help them with live gigs in the community. Skills acquired throughout the course are utilised through performance, audio/sound engineering, and backstage work.



# Photography A/T

## Photography A/T

Photography has become part of everyone's life. Selecting photography as part of your college package gives you the chance to be creative, gain problem-solving skills, and to develop visual literacy skills.

Students planning a career in this field will have the opportunity to assemble a folio of work suitable for interviews for employment purposes or further study. You may simply want a creative subject to balance an academic package.

Both the Photography T and A courses are designed to provide a firm basis of knowledge for aspiring photographers and for students studying related visual communication courses.

Both give ample scope for serious studies in all aspects of black and white, digital and colour photography.

## Photography T

In this tertiary course students are expected to undertake research related to various aspects of photography, as well as complete the same class based activities as A students.

## Photography A

Photography as an accredited course has a practical emphasis, with the students not expected to undertake major research assignments.

The theory, skills and concepts are the same as the T course and are ideal for students wanting to add a creative subject for balance.

## Course Patterns

This course is non-sequential.

It is advised that students complete Foundation Photography before completing Photography Applications and Introductory Digital Imaging before Continuing Digital Imaging.

## Units

### Foundation Photography A/T

This is an introductory unit for students to start their photography studies. This unit covers traditional black and white photography, from taking the photograph to printing in the darkroom.

### Continuing Photography A/T

This unit continues on from Foundation Photography. Advanced black and white and/or digital.

## Photography Applications A/T

This unit is an continuing unit in photography. The unit covers lighting, advanced black and white and/or colour and/or digital photography.

### Introductory Digital Imaging A/T

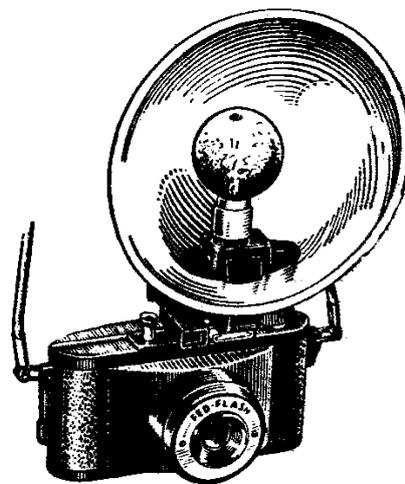
Students will explore digital photography by taking photographs, scanning, and using Photoshop to manipulate photographs.

### Continuing Digital Imaging A/T

This unit extends the students from what they learnt in Introductory Digital Imaging to show the possibilities in digital photography.

### Art Photography A/T

Photography as Art is an advanced unit. The students explore a range of artistic techniques, styles and subject matter.



# Visual Art A/T

## Visual Art A/T

It's never too late to start studying Art and Design because they come in so many different forms and can be related to a wide variety of subjects, issues and ideas.

The Visual Art courses aim to heighten your awareness of your environment and to help develop your skills, knowledge and techniques within Art and Design.

You will be encouraged to work with the teacher and independently to maximise your individual skills and to broaden not only your own cultural awareness, but also your peers and colleagues through a variety of College events.

## Course Patterns

All Semester Units are T or A. Both T and A courses aim to develop the student understanding in both the visual and design concepts in relation to the history of visual art.

## Units

The units are designed to isolate specific techniques and for you to develop skills within each area.

## Exploring Visual Arts A/T

Introductory unit which covers a range of Art making concepts with 2D and 3D mediums and techniques.

## Drawing A/T

Students experiment with a variety of drawing media and techniques to produce teacher directed class work and a student directed major work.

## Printmaking A/T

Students are exposed to a range of printing techniques, including lino, wood block, screen printing and etching.

## Painting A/T

Participants gain understanding and skill in relation to the discipline of painting. They experiment with a variety of medium and techniques.

## Portfolio Preparation

Using the skills and knowledge gained through other Art and Design units. Students develop a comprehensive portfolio of work (2D and 3D) that could assist them in gaining entry to the appropriate educational institution after college.

## Ceramics and Glass Art

Students can elect to study specialist streams in Ceramics and Glass and achieve a Minor/Major. Ceramics and Glass units can also be used with other Art and Design units to contribute to a Minor, Major or Double Major.

## Exploring Ceramics

It is an introductory unit, which gives students the basic skills involved with using clay. It is preferred that students complete this unit before other units of Ceramics.

## Ceramics Decoration and Firing

Working in clay the emphasis of this unit is looking at a range of different ways to decorate including glazing. The firing component looks at other forms of firing such as Raku firing.

## Ceramics Sculpture and Mixed Media

This unit looks at ways to extend the repertoire to larger pieces, mixed media and Installation. It looks at Ceramics from a sculptural and not functional approach.

## Ceramics Negotiated Study

This unit allows a keen student to extend themselves by negotiation with the teacher to work in clay.

## Exploring Glass

This is an introductory unit that covers the basics of Glass such as joining, slumping etching and casting glass.

## Visual Art Negotiated Study 2D A/T

This unit is available to students completing a Major who want to investigate their own area of study using 2D materials and techniques. The unit is student directed with teacher guidance, allowing students to build a body of work towards creating their own portfolio.

## Graphic Art Design in Print A/T

In this unit students design and create artworks that would be used for print from topography to illustration. Students experiment with a range of 2D media and techniques.



# **Commerce, Legal Studies and Social Sciences**



## Business A/T

This course is designed to develop an awareness and understanding of business in contemporary society through the study and application of the principles by which business operates. The economic, accounting, legal and marketing aspects of business will be explored and applied to a variety of business situations.

Business is a study of a variety of disciplines that are relevant to the business environment for employees, consumers and those dealing with business. Business is distinctive, in that it encompasses the theoretical and practical aspects of business and management in context, which students will encounter in life.

Contemporary business theories, practices and issues are incorporated in the course providing academic rigor and depth which provide an excellent foundation for students engaging in further tertiary study or employment.

The course challenges students to consider the broad ethical and social consequences of business decisions, and provides an opportunity to develop an awareness of the conflict of interest that may occur between the goals of business and the concern for the global ecosystem.

### Course Patterns

There are four standard units offered within the course, each of a semester duration. There are also four half semester or term units and it is recommended that the units be studied in the order listed.

### Units

#### Small Business and Business Plan

This is an introduction to the world of business and the importance of business planning. After an examination of the business structure and the importance of business in Australia, the business plan is introduced and developed through the unit.

Some of the topics covered in the unit include: the business world, entrepreneurship, types of business entities, the business life cycle and key considerations when setting up a business.

#### Marketing Media and Communication

The main area of study is an examination of the process of marketing from conception of the product idea to the sale of the product and earning a profit. Some topics covered in the unit include: consumer buying habits, ethical marketing, target market and market segmentation, promotion, public relations, social networking and E-business.

#### Financial Management and Current Issues

This unit explores principles and techniques of financial management and the current issues facing business.

Some topics in this unit include: financial management objectives, financial markets, sources of finance, ethical and legal aspects of financial management. Current issues include the impacts on business of natural disasters, climate change, technology and E-business

#### Human Resources and the Future of Business

One half of the unit explores the nature of Human Resource Management in organizations while the future of business is investigated in the other half unit.

Some topics include: stakeholders, processes and strategies in the Human Resource Management, corporate and social responsibility, the history of business, futurists, opportunities for growth and entrepreneurship, sustainability, changing employment and patterns of consumption.

**Note:** Students may combine a minimum of a minor in Business with at least a minor in Accounting or Economics for a Commerce major, major/minor or double major.



## Economics T

Economics is the study of how individuals, groups and nations use limited resources to satisfy wants. Every member of the community is affected by economics every day; by their own decisions or the decisions of others, by government economic policy or through the focus by the media on economic issues.

An understanding of Economics provides an important key to understanding and effectively participating in a modern society. Accordingly, the course is intended to contribute to the general education of students, as well as provide a solid grounding for students who wish to study Economics or related subjects at tertiary institutions.

### Course Patterns

Economics is made of standard semester length units (1.0 points). Each of these can also be taken as half-semester length units (0.5 points).

### Units

#### Introduction to Economics

The content in this unit is designed to ensure students gain a basic understanding of the economic problem. This is achieved through the understanding of the core material. Some of the topics covered are: opportunity cost, the price mechanism, resources and the types of economic systems.

#### Macroeconomic Theories and Issues

The content in this unit is designed to ensure students gain a basic understanding of how the macro economy functions. Students will be introduced to a simple model of the economy. additional sectors are then introduced into the model to help illustrate the complexities of the system. Topics covered include inflation, unemployment, internal equilibrium and the multiplier process.

#### Globalisation and Trade Economics

The content in this unit is designed to ensure students gain an understanding of the operation of the global economy and its impact on individual economies throughout the world. Topics covered include: the key features, global economic trade, international trading organizations, trading bloc and agreements.

#### Development and Research Economics

The content in this unit is designed to ensure students gain a basic understanding of the terms, concepts and issues that relate to economic growth and economic development. Topics covered include: the nature, measurement and theories of growth and development.

The research unit is designed to ensure students gain a higher level of understanding of the terms, concepts and issues that relate to a variety of research topics.

#### Theory of the Firm and Market Failure

The content in this unit is designed to ensure students gain an understanding of the market structures in our economy, competition and regulation in the market-place.

#### Political and Population Economics

The content in this unit is designed to ensure that students gain an appreciation and understanding of the role of Government in the Australian economy. Students will study government regulation, reasons for intervention in the economy by government and social economic policy related to income and wealth issues.

#### Economic History (0.5)

The content in this unit is designed to ensure students gain an understanding of the history of the Aboriginal economy prior to European settlement, the industrial and agricultural revolutions and the key events in Australia's economy since settlement. The development of the theories and ideas which have influenced economic thinking. Classical, Marxist, Keynesian, and Monetarists ideas as examples are also covered in this unit.

## Geography A/T

Geography is the study of people, places, natural phenomena and the entire world itself. No longer just finding places on maps, Geography explores the interrelationship between people and their environment, and allows students to study a range of contemporary issues. Fieldwork is an essential part of Geography, and study outside a traditional classroom setting enables students to prepare for flexible learning settings in workplaces and further education. Geography pairs well with a number of the social sciences (Sociology, History, Global Relations) as well as Outdoor Education and Science. If numbers permit, UCSSC Lake Ginninderra plans to begin a Geography program in 2014.



### Course Patterns

Geography is made of standard semester length units (1.0 points). Each of these can also be taken as half-semester length units (0.5 points).

## History A/T

The study of history — people, places and events builds skills in research and analysis and enables students to explore, question and problem solve. History is exciting. It enhances students knowledge of the world and their understanding of human experience. It encourages students to reflect on their own values and ideals.

### Course Patterns

This course is non-sequential and there are no prerequisites and no compulsory units. All units can be studied at T or A level. The course may be studied as a minor, major, major minor or double major. The semester units (value 1.0) accredited to this course are described opposite. These units can also be divided into discrete term (0.5 value) units.

### Units (Modern History)

#### Australia: A new Nation

This unit examines Australia from the end of the First World War, through the 'good times' of the 1920's and the difficulties of the Great Depression, to Australia's involvement in the Second World War and its impact on Australian foreign policy.

#### Australia: Transition to Nationhood

This unit examines the issues and events in the society of the young Australian colony and its move towards federation, culminating in Australia's involvement in the First World War.

#### Dictatorships in the Modern World

What is Authoritarianism? An exploration of the concepts of power and control with reference to dictators such as Hitler, Stalin, Mussolini, Mao, Gaddafi, Hussein, and Mugabe.

#### Modern China from Manchu to Mao

The impact of Western intrusion on traditional China and the Chinese people through to Communist victory in 1949 is examined. Particular focus is given to life under Mao Tse-tung and changes since Mao's death.

#### Modern Japan from Tokugawa to Today

To develop an understanding of the events and figures that shaped modern Japanese history, this unit journeys from Tokugawa to Meiji Japan.

#### Conflict and Issues in the Modern World

With an emphasis on modern conflicts such as The Middle East, Rwanda and Fundamentalism, this unit examines the political, social and economic challenges to nation states and national identity.

## Units (Ancient History)

### Shang to Tang Dynasty

With special emphasis given to the development of Chinese philosophy, religions, inventions, scientific discoveries, and culture, this unit examines the origins of the Chinese people from the Prehistoric period to the Six Dynasties.

### Greece to the Persian Wars

This unit offers an examination of early Greek culture with reference to the Minoan and Mycenaean civilisations. It includes a study of early Greek institutions and the development of democracy, the war against Persia and the importance of individuals such as Solon, Themistocles and Leonidas.

### The Land of the Pharaohs

This unit explores aspects of Ancient Egypt, including the role of the Pharaoh, dynastic periods, social structure, everyday life, religious practices, funerary rites, art and architecture.

### The Roman Republic

This unit offers an examination of Rome's early history, the emergence of the Republic and the process by which the Republic became an Empire.

### The Roman Empire

This unit offers an examination of life in Rome under the emperors, the development of Christianity and the decline and fall of Rome.

### The Dark Ages

Through the study of the legacy of the early Middle Ages in Eastern and Western Europe, this unit provides a background to the major changes that occurred in the later Middle Ages. It covers Christianity and Islam, later invasions of the Vikings and Normans and focuses on significant figures, such as Mohammed, Charlemagne and Theodora of Byzantium.

### Robin Hood, King Arthur and Romance

Examines Britain at the time of the final withdrawal of Roman power, including the organisation of post-Roman society, especially religious, military, cultural and political life.

### The Native and African American Experience

This unit examines the experiences of Native Americans and African Americans in the United States, from a white colonial and slave-trading society to the present day.

## Legal Studies A/T

Legal Studies examines the way the law relates to and serves both individuals and the community. It focuses on developing an understanding of the way in which law is developed, structured and operates within Australian and international contexts. It develops a wide range of understandings and skills for independent inquiry, critical thinking and informed decision-making.

Legal Studies is concerned with the investigation and understanding of laws and their impact on society. Students of Legal Studies should not only examine and analyse current laws, they should also examine alternative proposals to such laws. It is not only designed for students contemplating the law as a career, although they will certainly benefit. It is equally appropriate as a preparation for further studies in Business, Accounting, History, Information Management, Hospitality and Tourism.

This course is non-sequential and there are no prerequisites or compulsory units. All units can be studied at T or A level. The 0.5 (half standard) units listed in combination make up the semester units studied in this course.

### Units

#### Introduction To Legal Systems

This unit defines the concepts of the law, rules, norms and customs and looks at the influences on these. Students will study the nature of justice and the types of laws.

#### Sources of Australian Law

In this unit students will concentrate on Australia's legal system. It will cover our Constitution, Parliament and the court system. There is an excursion to the ACT Magistrates and Supreme Courts, followed by a visit to Parliament House.

#### Torts

This covers the definition and classification of Torts and will cover the following areas of Tort law: negligence, trespass, nuisance, defamation, employer's liability and the procedures followed in a civil court case.

#### Crime

Students will study the definition and classification of crime, the elements of a crime, sources of criminal law, including the court hierarchy. They will also look at the investigation and procedures in a criminal trial and the defences available.

#### Justice

Examines the procedures in a criminal case, both pre-trial and the trial itself. The concepts of justice and criminology will be covered, including the types of pun-

ishment, prisoner rights and the rights of the victim.

#### Family Law

Students will study the areas of: the nature of marriage, the structure of a family, the Family Court, types of personal relationships within the law, the rights of the child, adoption, dispute resolution and various family law issues.

#### World Order

Students will study the need for world order, the type of conflicts, the implementation and types of international agreements, the role of international tribunals, international crime and trade agreements and the effectiveness of international law.

#### Cyber Crime

The areas covered will include, the definition and classification of cyber crime, the Code of Practice and other relevant codes, security issues (fraud, hacking, viruses, spam/phishing and cyber bullying/stalking), and the education and prevention of cyber crime.

#### Consumer Law

Students study contract law and the elements which make up a contract. The laws that are relevant to the consumer and the problems of applying contract principles to consumer transactions are studied.

#### Environmental Law

The nature and scope of environmental law and its origins, including the role of governments, the United Nations and the International Court of Justice. International environmental issues such as Antarctica, world forests, genetic engineering, atomic testing and genetically modified foods.

#### Human Rights Law

The issue of human rights and their development, the current legal situation and the need for a Bill of Rights will be covered in this unit. Discrimination in Australia, balancing the needs of a society with the individual freedoms under the law will also be considered.

#### Legal Issues & Gen Z

The key legal concepts and principles around Gen Z will be covered in this unit, such as socio-cultural and relationship issues. This involves the family, sex, drugs, alcohol, driving, bullying are covered.

#### Current Legal Issues

A detailed study of significant and topical issues. It will entail the study of at least two issues, the selection of which will take place as a result of many topics being offered and students making a choice.

## Psychology A/T

*"Each of us is, in some way, like all other people, like some other people, like no else," (Allport, G: 1955).*

This paradox lies at the heart of Behavioural Science which aims to understand the universality of human experience, as well as individual and cultural differences. The subject area promotes objective thinking and evidence based research, drawing on various methods of enquiry as the basis for exploring, understanding and interpreting human behaviour.

This Psychology course provides students with opportunities to be involved actively in the articulation and clarification of attitudes, values and beliefs and to apply principles to real life situations. Understanding human behaviour facilitates development of the self as well as more effective participation in the ever changing social context.

Over the course of their study, students will learn to explain human behaviour through exploring and applying a variety of theoretical perspectives and practical strategies. Psychology promotes objective thinking and evidence based research, drawing on various methods of enquiry as the basis for understanding and interpreting human behaviour.

## Course Patterns

There are no compulsory or pre-requisite units for this course. All units shown are T and A. Some unlisted units are available as 'T only' eg Methods of Psychology, Independent Study and some as 'A only' eg The Self, The Self in Relationships

Combinations of the 0.5 units listed below will be taught as semester units in this course.

## Units

### Introduction to Psychological Methods

In this unit, students will critically assess the nature, scope and research methods of psychology. Students will also study and apply theoretical perspectives, along with examining ethical issues relevant to the discipline of Psychology. There will be opportunity for students to apply acquired psychological knowledge to real life experiences.

### Attitudes and Prejudice

Students studying this unit will examine and evaluate the formation and measurement of attitudes and attitude changes. Students will be involved in critically analysing the processes involved in the formation of attitudes. On completion of the unit, students will be able to communicate critical understanding of the nature of prejudice and strategies to deal with prejudice.

## Social Influence

This unit will enable students to examine individual behaviour and analyse how it is influenced by other people within a social context. Completion of this unit will equip students with the ability to examine and evaluate the nature and processes of group and social behaviour and the different factors that influence this behaviour.

## Learning and Memory

In this unit, students will apply appropriately acquired knowledge to real life situations. Students will also examine and evaluate the learning and memory processes. This unit will also involve analysis and evaluation of different learning theories, along with the application and communication of concepts and theories to students' experiences and learning styles.

## Motivation and Emotion

Students studying this unit will be involved in analysing and evaluating the concepts and underlying factors concerning motivation and emotion. Furthermore, students will be able to analyse and apply appropriately acquired knowledge to real life experiences.

## Personality

In this unit, students will learn how to identify, compare and evaluate personality theories and personality assessment techniques. There will be opportunity for students to apply acquired psychological knowledge to real life situations. On completion of this unit, students will be able to communicate knowledge and understanding of personality using appropriate language and conventions of psychology.

## Abnormal Psychology

This unit will give students the opportunity to examine and analyse the nature of behavioural disorders and the issues that surround them. Students will also compare and evaluate the theoretical explanations of mental health and their treatments, as they are applied to individuals/groups. The opportunity to explore and critically assess community perceptions and reactions to behavioural and mental health will be incorporated into this unit.

## The Psychology of Happiness

This unit will examine the biological basis for emotions. The theories of Seligman, Frederickson and others which underlay the field of Positive Psychology will be examined along with methods of developing positive relationships with others. Studies of health and well being will also be part of the unit.

# Social And Community Work A/V

## Social and Community Work A/V

### CHC20108 Certificate II in Community Services

This course aims to provide opportunities for students to gain the skills necessary to make a smooth transition to post school options, especially those in the social and community work area.

The course concentrates on the underpinning knowledge required for work in the community services industry. Students explore factors which have an impact on the communication process. Students learn skills which should assist them in communicating effectively at a routine level in a range of environments.

To attain a Certificate II qualification, students must be deemed competent in five core and six elective competencies. Students must also complete a Structured Workplace Learning placement in Childcare, Aged Care or Disability.

Students who successfully meet the requirements for the vocational units of competence embedded in the course will receive a Statement of Attainment for the units of competence they have achieved.

### Course Pattern

There are no compulsory or prerequisite units in this course. The units are discrete and are usually offered in the order of Understanding Community Services, Disability and Aged Care Work, Children's Play and Issues in Youth Work.

### Units

#### Understanding Community Services

This unit examines the nature of the community services sector, the services, clients, employers and employees. It introduces the student to the industry in which they will be completing work placement and provides valuable insight into the range of jobs in the Community Services and Health Industry. This unit equips students with knowledge of the structure, functions and philosophy of agencies in the community sector.

#### Disability and Aged Care Work

This unit should enable students to develop knowledge of the concepts and definitions of disability. Students will develop an understanding of how disability impacts on the everyday life of a person. They will learn principles ageing which will enable them to apply developmental knowledge to care giving practices.

## Children's Play

This unit focuses on providing students with experiences to support child's play and learning, prepare for work in the community sector, communicate with people accessing the services of the organisation, follow policies and procedures and programs of the organisation, work with others and participate in OHS processes.

### Issues in Youth Work

This unit should enable students to work with others, communicate with people accessing the services of the organisation, participate in OHS processes, work effectively with young people and prepare for alcohol and other drugs work.

### Sociology A/T



# Sociology A/T

Sociology examines the social and cultural factors that influence individuals, groups and institutions within society. Through the use of sociological theories, concepts and methodologies it focuses on the dynamics of these groups and how they relate to each other.

## Course Patterns

This course is non-sequential, though it is highly recommended that students begin their course with Unit 1, Introduction to Sociology. The units listed are classified as T and A. One 'T only' unit, Independent Study is available in consultation with the teacher after the completion of three semesters.

The value of each unit listed is 0.5 unless shown otherwise.

## Units

### Introduction to Sociology

This unit should enable students to: develop a critical awareness of the society in which they live, and of the behaviour of individuals within that society; develop an understanding of sociological methods, including the collection, analysis and interpretation of data; and develop a capacity for critical evaluation of different forms of information and evidence.

### Sociology of Ethnicity and Race (1.0)

This unit should enable students to: develop an awareness of ethnicity and race in human societies; and understand the origins of ethnic prejudice and how such attitudes are maintained and eliminated.

### Sociology of Gender

This unit should allow students to: develop an understanding of the difference between sex and gender; interpret and analyse the processes of gender identity; communicate an understanding of the gender inequality in socio-economic and political spheres.

### Sociology of Health and Medical Care

This unit should enable students to: develop awareness, knowledge and understanding of modern medicine; develop critical awareness of the changing patterns of illness and health management; and apply a critical sociological perspective to health and medical care.

### Sociology of Class and Power

This unit should enable students to: develop an awareness and understanding of class and power in human societies; develop a critical awareness of the stratification and power relationships in a society; and apply sociological knowledge for critical evaluation of different forms of information and evidence.

### Sociology of Education

This unit should enable students to: develop an overview of the place of education in the social system; analyse the impact of education in maintaining and/or changing the status quo, not only on class structure but also sex roles; and communicate an understanding of the relevance of correlations between type of education, class structure, religion, income and ethnicity.

### Sociology of Deviance

This unit should enable students to: develop an awareness of the way society produces conformity and establishes social control of deviant behaviour; develop skills in critical analysis of individual and group behaviour in society; and communicate an understanding of the theories of deviance and the social processes involved.

### Sociology of Religion (1.0)

This unit should enable students to: understand why people maintain, or lose, their belief in religion, and the way in which society, culture and religion interact to form particular patterns; analyse and investigate through contrast and comparison the world's major and alternative belief systems and world trends; and critically evaluate religion as an aspect of social structure.

### Sociology of Media

This unit should enable students to: develop an overview of the different types of media, including historical development, and the nature and impact of new and emerging technologies.

### Sociology of Youth and Culture

This unit should enable students to: examine historical perceptions of childhood and adulthood, and identify the place of youth in society; investigate and discuss the different social issues related to youth, subcultures and the transition to adulthood; and relate the theories of youth to real life experiences.

### Sociology of Work and Leisure

This unit should enable students to: develop an awareness of the origins of work and leisure; understand theoretical perspectives; and analyse patterns in Australia and overseas.

### Independent Study (T only)

The content of this unit will be negotiated with the teacher responsible. The subject matter may be an extension of content previously studied by the student or may be entirely new to the student. The emphasis will be on areas of special interest and value to the student. A minimum requirement of three semesters of Behavioural Science studies applies to students wishing to do this unit.



# Design

## CADD A/T

CADD (Computer Aided Drawing and Design) is a stream of the Design and Graphics course for students who are interested in all areas of Design, especially Industrial and Graphic Design.

After an introduction to design fundamentals and design processes, drawing studio projects will progressively transition to computer-aided drawing and 3D modeling and animation.

Studio exercises demand use of a mixture of visual media during the course. For those students serious about visual communication, this is an excellent course of study. The course would be a suitable foundation for further study in design, either academic or vocational.

## Course Patterns

The course is structured sequentially for either major or minor study. There is flexibility to study CADD, Engineering Drawing or Architecture units within the Design and Graphics course to complete a major.

There is a unique opportunity to undertake a double major by studying a combination of CADD and/or Engineering Drawing and/or Architecture.

Students should begin the CADD stream of the Design and Graphics course with the unit CADD.

## Units

CADD (Beginning)

CADD Applications (Continuing)

CADD Advanced (Continuing)

CADD: Major Design Project (Continuing)

## You can also study...

Engineering Drawing

Architecture

## What jobs can this lead to?

Animation

Engineering

Architecture

Industrial Design

Graphic Design

Landscape Architecture

## Unit Descriptions

All units described are semester-length (value 1.0).

### CADD (beginning)

This unit is studio-based and is designed to introduce students to the necessary conceptual understanding, graphic presentation techniques and visual language techniques in order to attempt the other units.

The use of a Design Folio for work presentation will be introduced, and the design process applied to project briefs. Students with no previous technical drawing or art experience will be catered for.

### CADD Applications (continuing)

Concepts introduced in CADD beginning will be more complex and challenging. Design briefs will be presented and developed and solutions will be presented by students. Basic workshop techniques including machinery safety will be introduced to facilitate the preparation of models to aid the assessment of designed solutions.

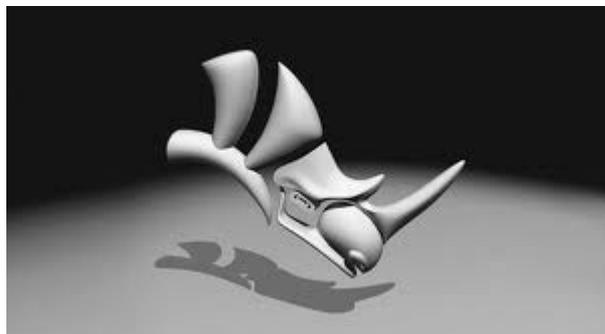
Assignments and the Design Folio will demand an increase in student research and investigation. Computer Aided Design, Animation and Graphic Design will be explored as a tool for documenting and presenting design ideas.

### CADD Advanced (continuing)

This unit is studio based and involves solving complex design briefs revolving around industrial design, manufacturing and technology, modelling and prototypes. External competitions can also form the basis of project work. The need to devise and produce a functional and working solution to design problems dominates this unit. CAD and 3D modelling will be used to explore design ideas and document solutions.

### CADD Major Design Project (continuing)

A continuation of two and three-dimensional work, developing skills in this area to a high level of proficiency which includes design functionality. Developing designs using briefs from real life clients will be central to this.



# Design and Graphics

## Architecture A/T

Architecture is a stream of the Design and Graphics course for students who are interested in Architecture, Engineering and building design.

## Course Patterns

The course is structured sequentially for either major or minor study. Architecture may be studied as a major under the Design and Graphics course, although there is flexibility to study a variety of units within the Design and Graphics course to complete a major: Architecture, CADD or Engineering Drawing.

A double major may be studied by enrolling in two units simultaneously in Architecture, CADD and/or Engineering Drawing.

Students should begin the Architecture stream of the Design and Graphics course with the unit Architecture.

## Units

Architecture (Beginning)

Architecture Applications (Continuing)

Architecture Advanced (Continuing)

Architecture: Major Design Project (Continuing)

*You can also study...*

CADD

Engineering Drawing

## What jobs can this lead to?

Architecture

Engineering

Industrial Design

Graphic Design

Landscape Architecture

Building

Surveying



## Unit Descriptions

All units described are semester-length (value 1.0).

### Architecture (beginning)

The use of a Design Folio for work presentation will be introduced, and the design process applied to project briefs. Architectural principles are applied to the design and/or problem solving process in the production of a range of tasks. Students will be asked to demonstrate the ability to communicate architectural ideas and concepts in a variety of ways such as oral, written, visual and three dimensional presentations. Students with no previous technical drawing or art experience will be catered for.

### Architecture Applications (continuing)

Architectural principles are further applied to the design and/or problem solving process in the production of solutions to larger design or building problems. Students will be asked to demonstrate knowledge of how architectural design impacts society and the environment, to make informed choices about personal, professional and vocational pathways, and to articulate an ethical stance in relation to an issue of sustainability through the design of a built environment or building.

### Architecture Advanced (continuing)

Architectural and town planning principles are applied in the design and production of solutions to larger urban design problems. Students will be asked to develop a further understanding of town planning and architectural terminology and language, social trends in relation to design of towns and buildings, articulate an ethical stance in relation to an issue of sustainability through the design of a built environment or building, and demonstrate a developed awareness of emerging technologies resulting from changing climate in the design of the built environment.

### Architecture: Major Design Project (continuing)

Architectural principles are further applied in the design and production of solutions to a small scale building problem. Students will be asked to demonstrate the ability to manage the creation of a set of architectural design drawings and model from conception to resolution, an accomplished ability to record and communicate the project management process, to foster appropriate industry links, and to present final products to an audience/client.



## Engineering Drawing A/T

Engineering Drawing is a stream within the Design and Graphics course for students who are interested in problem solving in the fields of engineering, manufacturing and building. Sketching and computer-aided drawing are also components of this unit.

It is highly recommended for students doing Wood or Metal studies to study these units.

### Course Patterns

The course is structured sequentially for either major or minor study. As well, there is flexibility to study Architecture or CADD units within the Design and Graphics course and complete a major.

A double major may be studied by enrolling in two units simultaneously in Engineering Drawing, Architecture and/or CADD.

Students should begin the Engineering stream of the Design and Graphics course with the unit Engineering Drawing.

### Units

Engineering Drawing (beginning)

Engineering Drawing Applications (Continuing)

Architecture (beginning)

Architectural Applications (Continuing)

### *You can also study...*

Architecture

CADD

### *What jobs can this lead to?*

Engineers

Architects

Building Contractors

Craft workers

Tradespeople

Industrial Designers

Landscape Architects

Technology Teachers

Set Designers

Surveyors

Electrical Technicians

Draftspersons

## Unit Descriptions

All units described are semester-length (value 1.0).

### Engineering Drawing (beginning)

This unit introduces basic skills in drawing for technology. Topics included are use of equipment, Australian Standards and types of drawing, and further development of basic skills in technical drawing and in using drawing to solve problems. Topics include geometry, orthographic drawing, pictorial drawing, and design communication. Computer-aided drawing is introduced in this unit.

### Engineering Drawing Applications (continuing)

In this unit students will solve design problems involving dimensioned orthographic views, solid geometry, auxiliary views, cross sections, assembly drawings, sketching and design communication. All topics involve computer-aided drawing.

### Architecture (Beginning)

The use of a Design Folio for work presentation will be introduced, and the design process applied to project briefs. Architectural principles are applied to the design and/or problem solving process in the production of a range of tasks. Students will be asked to demonstrate the ability to communicate architectural ideas and concepts in a variety of ways such as oral, written, visual and three dimensional presentations. Students with no previous technical drawing or art experience will be catered for.

### Architectural Applications (Continuing)

Architectural principles are further applied to the design and/or problem solving process in the production of solutions to larger design or building problems. Students will be asked to demonstrate knowledge of how architectural design impacts society and the environment, to make informed choices about personal, professional and vocational pathways, and to articulate an ethical stance in relation to an issue of sustainability through the design of a built environment or building.



# English and ESL

# English A

## English A

The college strongly recommends that students complete a major in English.

The A course is designed to encourage confidence and competence in written and oral skills. This course will assist particularly in coping with the writing and comprehension aspects of all subjects, and eventually, the expectations of employers and some tertiary providers.

Within the course, a pattern of study is used to develop language competency. All units incorporate reading, writing, listening and speaking activities. Special focus is given to preparing students for the workforce and includes strategies for completing forms, resume writing and interview techniques.

Choice of enrolment in either T or A English is dependent upon teacher advice and high school performance.

### Course Patterns

All Year 11 students in Semester 1 are enrolled in Introductory English for a 1.0 value unit. All Year 12 students in Semester 1 are enrolled in Communication and Popular Culture for a 1.0 value unit. Units thereafter are non-sequential and are of a term or semester duration. Choice depends on teacher/student selection.

Students can choose to include units to a value of 1.0 from ESL, Drama or Media to an English Minor.

Minor: 2 units

Major: 3.5 or 4 units

Major/Minor: 5.5 to 6.5 units

Double Major: 7 units or more

### Units (1.0 Value)

#### Beyond College

This Unit combines Heroes and Language—College and Beyond .

#### Children's Literature

This Unit combines Children's Literature and Short Stories.

#### Communication and Popular Culture

This Unit combines Communicate with Confidence and Popular Music.

#### Introductory English

This Unit combines Write Your Way and Real Life Stories.

## Media and Advertising

This Unit combines Film and Television and Advertising.

### Science Fiction and Fantasy

This Unit combines Science Fiction and Fantasy.

### Units (0.5 Value)

#### Advertising

Through the study of a variety of advertising media, the purpose and techniques of advertising and the development of marketing are examined. Using various technologies students create their own persuasive advertisements.

#### Children's Literature

A variety of written and visual texts for children and adolescents are used to explore themes, issues and the appeal of the genre.

#### Communicate with Confidence

This unit provides opportunities to explore a variety of texts to identify effective communication techniques. Special focus is given to developing oral and listening skills.

#### Contemporary Issues

Issues affecting the broader community are examined through written and visual texts. Issues range from the environment, alcohol and drug abuse, body image to consumerism.

#### Fantasy

The Fantasy unit involves the study of selected novels, short stories and visual texts. Special effects in filmic interpretations of the genre and the Journey of the Hero are among the aspects examined.

#### Film and Television

A selection of popular films and television programs is analysed to acquaint students with the various genres. Understanding film composition and techniques is integral to this unit.

#### Heroes

Through an exploration of a variety of texts aspects including the notion of hero and anti-hero, myths and legends and gender differences in the creation of heroes and heroines is studied.

## Images of Australia

Understanding cultural identity and issues such as sport, reconciliation and the bush legend are central to this unit.

## Images of Sport

Assorted texts and especially visual material provide the basis of this unit. Interpreting visual images to understand underlying messages including racism and sexism in sport, amateur and professional status are explored.

## Images of War

Through written and visual texts the nature of war is critically examined. To enhance an understanding of war's themes and issues, visits to national institutions is encouraged.

## Language—College and Beyond

A preparatory unit for post-college life, this unit develops communication skills and decision-making. Particular attention is given to the writing of resumes and job applications together with preparation for interviews.

## Popular Music

Using popular music, both the visual and written forms, the unit aims to establish the social, political and cultural contexts of the major genres from the 1950s onwards.

## P-Plate English

This unit identifies and analyses the different language forms relevant to obtaining a license, driving and owning a vehicle. Special focus is given to the legal aspects of buying, owning and driving a car.

## Print and Multimedia Texts

A variety of print and multimedia including broadsheet, community newspapers, magazines and video clips is studied to help identify the characteristics of the texts.

## Real Life Stories

Through critical response to a variety of biographical and autobiographical texts the nature of the human condition is explored. To develop understanding of the genre, students write their own life story.

## Science Fiction

The popularity of Science Fiction, especially films, is the main feature of this unit. Significant issues like utopia and dystopia and the role of the individual in society are studied.

## Short Stories

Demonstrating the skill of story telling, both written and oral is a key aspect of this unit. Where possible filmic adaptations of the stories studied are included and analysed. The composition of the short story is studied in depth.

## Suspense

A variety of texts, in which suspense is a key element, is studied to understand the genre and create original 'suspenseful' short stories.

## Understanding Gender Issues

Using a variety of texts and media, the construction of gender roles and expectations in society is critically examined. The myths and realities of gender stereotyping are investigated and evaluated.

## Write your Way

This unit encourages students to write in a variety of styles, genres and text types in a sustained manner. A folio of work is developed to showcase each student's growth as a confident writer.



## English T

The college strongly recommends that all students complete a major in English. T English is compulsory for entry to many university, CIT courses and selected occupations.

The English course offers a broad range of units which cater for the varied interests of students. All units develop reading, writing and listening skills, critical analysis and the ability to deliver well-researched oral presentations proficiently and confidently. Creative responses, integral to all English units, are intended to develop original thought and complement interpretive ability.

Choice of enrolment in either T or A English is dependent upon teacher advice and high school performance.

### Course Patterns

The introductory unit, Literature and Language, is compulsory for all Year 11 students in Semester 1. Subsequent choices are non-sequential.

Minor: 2 units

Major: 3.5 or 4 units

Major/Minor: 5.5 to 6.5 units

Double Major: 7 units or more

### Note

Students may choose to include one unit from either Drama, History or Media in an English Major.

### Units

#### Literature and Language

This is a compulsory unit for all Year 11 T students. It is designed to prepare them for the requirements of written and oral responses of subsequent T English units. One play, one novel, a selection of poetry, short stories and visual texts are studied.

#### Australian Literature

This unit involves the study of Australian literature from its origins to the present. Themes, including cultural myths and a sense of place, will be examined through a selection of poetry, prose, drama and visual texts.

#### Book to Film

Selected books and their adaptations to film are critically analysed in this unit. A study of the qualities of both the written and visual texts is a key component.

#### Children's Literature

This unit combines the theoretical and the practical. It involves the study of early forms of children's literature, a focus on a classic text, working with children at a local primary school or childcare centre and producing a book to publishing standards for a young audience.

#### Conflict in Society

A study of poetry, novels, plays and visual texts, which reflect a range of conflict, is the basis of this thematic unit. The nature of the conflict explored encompasses political, social, cultural and religious dispute.

#### Crime Fiction

A range of crime fiction including novels, short stories and visual texts is explored in this unit. The study of the genre includes the history and development of crime fiction and the nature of its increasing appeal to contemporary audiences.

#### English Language

This unit explores features including the origins of the English language, differences between spoken and written modes, the language of persuasion and cultural identity through language.

#### Independent Study

The content of this unit is selected by the student in consultation with the supervising teacher. The focus is on author or genre to enable the student to pursue an in-depth study.

#### Issues in the Media

Through a study of the media, including television, radio, newspapers, magazines and the internet, an analysis of topical issues like violence, gender stereotyping and drugs and sport is undertaken. Media modes and forms are critically examined to determine bias and develop critical viewing skills.

#### Life Stories

Life Stories focuses on the study of autobiography/biography. It includes the analysis of the genre style, purpose and techniques through the study of selected texts. The unit culminates in the completion of a researched auto/biography.

#### Literature of Adventure and Survival

This unit explores a variety of texts and personal experience to discover the nature of the adventure and survival genre and, especially, the concept of the strength of the human spirit in the face of adversity.

## Literature from Other Lands

In order to gain a wider understanding of issues affecting other parts of the world, literature from other lands examines a variety of texts reflecting diverse cultural backgrounds and perspectives.

## Literature of War and Peace

The unit aims to foster the value of peace, while not denigrating the heroism and sacrifice of participants in war. A variety of novels, poetry, songs, plays and visual texts dealing with the nature of war are studied.

## Myth and Fantasy

A range of texts from across cultures and time is explored. The focus is on the commonality of creation, hero and trickster myths and on exploring the 'hero's journey'.

## Nineteenth Century English Literature

Through novels, poetry and plays this unit explores the works of some of the "greats" in English Literature. It also involves research to establish the social and historical contexts of the texts.

## North American Literature

Materials ranging from the Native American oral tradition to modern novels, plays, poetry, songs and visual texts are studied. Special focus is given to geographical, historical and cultural backgrounds of the literature.

## Novels

The study of the novel explores the nature of the genre and its application to specific texts in the context of the history of the novel. A range of authors from the 19th century to the present is covered.

## Plays

A selection of plays representing different types and from different periods is read. Opportunities to attend live performances are provided whenever possible.

## Poetry

A wide range of traditional and modern poetry is discussed and analysed to develop an appreciation of the genre. Special emphasis is given to either a literary period or a specific poet.

## Science Fiction

A range of science fiction literature including novels, short stories and visual texts is covered in this unit. The development and constitution of the genre's themes and

especially the nature of utopia/dystopia is explored.

## Shakespeare

Shakespeare is explored through an in-depth study of at least two plays. The unit also encompasses an analysis of Shakespeare's time to establish the context of his writings. Where possible, classes will attend live productions of Shakespearean plays.

## Short Forms

To understand the short form of writing a variety of texts including short stories, novella, essays, articles and diaries are studied. Emphasis is given to developing students' skills in writing in the short form.

## Women in Literature

Through a range of written and visual texts the roles of women are examined. Focus is given to the relevant historical and cultural context of the texts.

## Writing

This unit introduces a broad range of writing styles and forms to encourage experimentation with writing. It culminates in a journal and a folio of work that reflects students' learning journey.



## ESL T

This course is appropriate for non-English speaking background students, who have spent less than seven years in an Australian or English language school. The course is a suitable alternative to English (T) for students who wish to pursue post-college study.

The course aims to:

- develop students' listening, speaking, reading, writing, library and research skills from the level required for everyday purposes to a level suitable for entry into a tertiary institution;
- familiarise students with how to use English for specific purposes;
- develop innovative and creative approaches to improving writing;

and

- develop students' written and oral critical responses to a variety of texts.

### Course Patterns

The units are sequential, although variations are considered. To allow flexibility of entry and exit for students, all units are divided into 0.5 value units.

Minor	2 units
Major	3.5 or 4 units

## Units

### Introductory Research and Writing Skills

Introductory Research Skills (0.5)  
Writing Paragraphs and Essays (0.5)

This unit introduces students to research using the library and improving writing skills from vocabulary and sentence structure to the paragraph. In addition, emphasis is also given to basic essay writing skills and the use of formal and informal language.

### Exploring Literary and Formal Texts

Literary Texts and Australian Idiom (0.5)  
Academic Writing (0.5)

Using Australian literature, film, music and popular culture, the study of short literary texts such as poems, short stories and folk tales are used to help students explore and understand literary texts and Australian idioms.

### Research Skills, Literature and Film

Research and Presentation Skills (0.5)  
Exploring Film and Literature (0.5)

A variety of texts are read and viewed and focus is given to developing oral communication skills for a variety of contexts. Further development of effective research and writing skills is emphasised, including details such as note-taking and correct referencing.

### Issues in Literature and Culture

Essay Writing for Specific Purposes (0.5)  
Literature and Culture (0.5)

This unit gives renewed focus to the essay structure and how to present an argument in oral and written contexts. Literature from a range of cultures is studied to develop an understanding of the cultural traditions of countries that make up multicultural Australia.

## ESL A/T

Whilst the content is similar in both ESL T and ESL A, the assessment tasks have a more academic focus in the ESL T units.

## ESL A

This course is designed for students from a non-English speaking background who have been in an Australian or English language school for less than seven years. It is most suitable for students who need additional opportunities for language development and who do not wish to complete a T package but are wanting entry to CIT or the workforce.

The course aims to:

- help students use English effectively and gain self-confidence;
- encourage students to use English creatively;
- develop students' critical understanding of issues in the general community; and
- assist students to cope with the language demands of their other subjects.

### Course Patterns

The units are sequential, although variations are considered. To allow flexibility of entry and exit for students, all units are divided into 0.5 value units.

Minor:	2 units
Major	3.5 units or 4 units

# **Industrial Technology**

# Automotive Technology A/V

## Automotive Technology A/V

The Automotive Technology course offers students opportunities to develop basic skills and knowledge necessary to safely maintain and repair single cylinder, two & four stroke motors, multi cylinder engines, and a variety of electrical equipment related to motor vehicles.

In addition the course enables students to gain nationally recognised Automotive Technology vocational qualifications in Automotive Technology. This will assist students with entry into Trade courses offered by the CIT and TAFE institutions in other states.

### Course Patterns

Studied as an A minor, A/V major, or as a major minor (with the work placements). Students who successfully complete the two year major (including Vocational Competencies) will be awarded the nationally recognised AUR10105 Certificate I in Automotive Technology.

### Units Available

Automotive Fundamentals  
Automotive Electrical Systems  
Automotive Engine Systems  
Automotive Vehicle Systems  
Automotive Structured Workplace Learning 1 and 2

### What's in the course?

The Automotive Retail and Repair industry has positions each year for apprentices and trainees in different occupations. Some examples of people who use Automotive Technology in their daily lives include:

Automotive Mechanics  
Auto-Electricians  
Diesel Mechanics  
Auto body Repairers and Refinishers  
Automotive Parts Suppliers  
Accessories and Vehicle Sales persons  
Tyre Fitters  
Specialised Transmission Fitters  
Automotive Glaziers

Commencement in this Automotive Training Course can often lead students to gaining an Australian School Based Apprenticeship in Automotive Technology giving them the advantage of an earlier start to their training while still gaining their Year 12 Certificate.

## Unit Descriptions

All units described below are semester-length (value 1.0) except for the Vocational Placements. (value 0.5)

### Automotive Fundamentals

This unit introduces students to the operating principles of 2 and 4 stroke engines, particularly in relation to the repair and maintenance of outdoor power equipment such as lawn mowers. The uses of workshop tools and equipment are practised at OH&S standards. This unit will also cover environmental and sustainability best practice as it applies to the Automotive Workplace.

### Automotive Electrical Systems

Students will learn the operating principles and components of electrical systems in cars. Electrical and electronic components will be tested, dismantled and analysed. Circuit diagrams will be used and electrical circuits will be constructed. Students will identify dangers of electrical systems and work to OH&S standards in the Workshop.

### Automotive Engine Systems

Students will be able to work on and gain more detailed knowledge of engine mechanics and reconditioning, fuel induction, lubrication, exhaust, cooling and ignition systems. The use of Engine Analysers, adjustments and tuning will be practised.

### Automotive Vehicle Systems

Transmissions, driveline, brakes, suspension and steering systems will be investigated thoroughly in both the theory room and the workshop. Removal, balancing and refitting of tyres and wheel assemblies will also be studied.

### Structured Workplace Learning (value 0.5)

Two vocational placements, of five days in length during which students undergo on-the-job training with local industry employers. These are highly recommended for giving students experience in industry.

Students not completing the Certificate I will receive a Statement of Attainment listing the competencies achieved.



# Furniture Construction A/V

## Furniture Construction A/V

This wood based course is for students who enjoy working with wood. Successful completion of this course can give the student the opportunity of gaining advanced standing in some of the subjects should they wish to pursue a career in wood based occupations such as carpentry, cabinet making, shop fitting, forestry, or kitchen manufacturing.

### Course Patterns

The units of study combine to provide a *wide variety of experiences* in designing, constructing, and applying different finishes to a range of projects. There is an advantage in completing all four units.

There is free choice for the final project in semester 4.

### What's in this course?

This course has wide appeal but is very relevant for those interested in a career in a wood related occupation. The course would also assist in learning some practical skills and how to work with timber in the production of various projects.

The course has one unit per semester in Year 11 and in Year 12.

To obtain the full benefit of the course you must complete two work placements during the two years. This gives you the opportunity of gaining LMF10108 Certificate I in Furnishing. You could then apply for exemptions in further training, e.g. at CIT.

The course expects students to participate to the best of their ability, with courtesy and respect to others and equipment. It exposes students to modules of work which will assist them with;

- Safety in the workplace
- Proper use of Hand and Power tools
- Timber preparation and machining
- Different Timber finishes
- Planning for a project
- Issues and Expectations of working for an employer in a practical area

Once a module is completed then you may request to be assessed for competency for the module.

Practical projects, which explore various construction methods, will be completed each semester.

Past students have appreciated the vocational work placements. Many have found it to be a great introduction to the world of work. Another benefit to you is the possibility of full time employment arising from the work placement.

## Please Note

It is strongly recommended that you select a CAD or Engineering Drawing course to fulfill the drawing requirements of this course.

## Units

All are semester-length. (value 1.0)

### Timber Furniture Construction

This unit is an excellent introduction to the furniture construction industry. Students are provided with a opportunity to create practical and interesting projects.

In the workshop, students will be given access to machinery and tools which many have previously not been exposed. Emphasis is placed on the development of workshop skills and the completion of practical projects.

### Timber Machining and Assembly

This unit further explores the furniture construction industry and encourages students to achieve at a higher level through the development of their skills.

Students learn to use new tools and build on their workshop techniques. There is a continued focus on practical strength and the supporting theoretical knowledge.

### Timber Furniture Project

This unit requires the knowledge and abilities that have been acquired in the previous two units. Students will choose their projects and apply basic design principles within the workshop.

These projects will be of greater difficulty, allowing the fine tuning of techniques and processes and will require the students to obtain a finish of exceptional quality.

### Timber Furniture Major Project

This unit is an exciting unit for the students as they have worked hard developing their skills and workshop knowledge. They are given the opportunity to produce a final project of their own choice.

This final project is a picture of each student's capabilities. The course gives students a sound appreciation of what the furniture construction industry has to offer.

### Structured Workplace Learning (value 0.5)

Two vocational placements, of five days in length during which students undergo on-the-job training with local industry employers. These are required for Certificate I.

Students not completing the Certificate I will receive a Statement of Attainment listing the competencies achieved.

# Metal Engineering C

## Metal Engineering C

Students choosing Metals Engineering as a course of study will be studying units of work based around National Metals and Engineering Training Package competencies. These competencies are recognised nationally and allow for credit transfer to institutions such as CIT and TAFE.

Students may complete MEM10105 Certificate I in Engineering or MEM20105 Certificate II in Engineering.

### Course Patterns

Students would normally study Metal Engineering across 4 units.

The units of study combine to provide a *wide variety of experiences* in designing and constructing a range of projects. Naturally there is an advantage in completing all four units. The last unit is very popular, as there is the free choice option for the final project. More advanced students will be able to negotiate projects.

### What's in this course?

This course allows for students to complete set work and also some of their own artefacts in metal by negotiation. It covers areas such as sheet metal, light metal fabrication, metal machining, welding, heat treatment of metals which allows a student to gain work skills and an understanding of the Metals and Engineering profession.

Some Engineering Drawing is also included in this course to cover communication and interpretation of engineering processes. It is strongly recommended that students choose Engineering Drawing 1 to complement their studies in this subject.

### Units

All those outlined here are semester-length, value 1.0

#### Introduction to The Metal Industry

Students gain experience in the Metal Workshop environment and developing their skills in Metal Engineering. Students will be introduced to Manual Metal Arc Welding, carry out mechanical cutting, interpret technical drawings, perform engineering measurements, apply principles of Occupational, Health & Safety and use hand tools.

#### Metal Trade Skills

Students will undertake larger jobs requiring accurate measuring, welding and basic fabrication skills. They will further develop their workshop skills through the construction of metal projects such as car creepers and car stands.

## Metal Skills and Processes

Students will complete tasks that develop safe and accurate, MIG and electric arc welding practices and fabrication techniques. They will be introduced to machines such as the milling machine and metal lathe whilst learning to use accurate measuring instruments such as vernier callipers and micrometers.

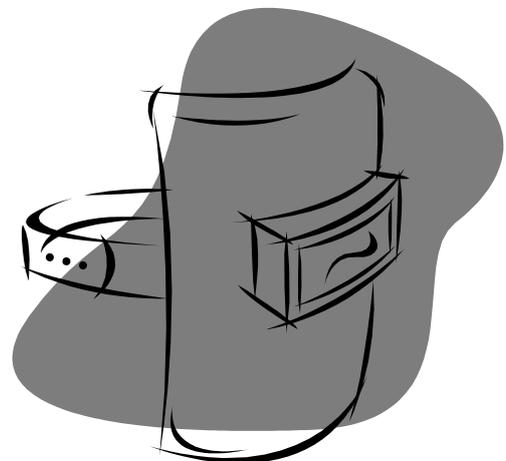
## Working Within the Metal Industry

Students will consolidate their skills by undertaking larger more involved projects that require a greater level of skill and self direction.

## Certificate I and II

These certificates are given to students who complete the required competencies from the National Metals Training Package as well as completing work placements. These Certificates are transferable to other institutions and will mesh into many courses of study available in the Metals and Engineering field.

If a smaller number of competencies are completed then a student will be issued with a Statement of Attainment. A qualified workplace assessor will do all assessment.



# **Information Communication Technology**

# Business Administration A/V

## Business (Office) Administration A/V

The A/V course, Business Administration, is designed to provide students with the opportunity to develop specific skills associated with information management and processing. The focus of the course is on giving students a wide range of skills, both for personal use and for employment in the business world.

### Course Patterns

The course is made up of nationally accredited competencies. Each unit contains components involving key-boarding, use of computers, interpersonal and communication skills, and office procedures.

Students are eligible to receive BSB10107 Certificate I in Business or BSB20107 Certificate II in Business if they complete the required competencies which are covered in a major course (4 units). A minor course (2 units) is also available.

Students not completing the Certificate I will receive a Statement of Attainment listing the competencies achieved.

### Looking for a job in an office when you leave college?

This course provides an integrated study and development of the wide range of skills required of students seeking employment in offices, and in the modern business world in general.

There is particular emphasis on achieving good keyboard skills and speeds, and on the office applications of computer software. These applications include word processing, spread sheets and databases. Each student works individually at a computer.

### Units

The units listed are all semester length (value 1.0). Half semester units (0.5) are available for flexible entry and exit.

### Working in Business Administration 1

Telephone and oral/written communication techniques, computer operations, create simple documents. Occupational Health and Safety awareness, environmental work practices.

### Working in Business Administration 2

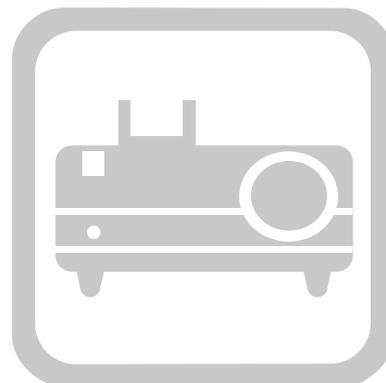
Mail processing, filing, record keeping, spread sheets, petty cash and banking and working in a business environment, office equipment, organise work schedules.

### Working in Business Administration 3

Databases, electronic presentations and desktop publishing.

### Working in Business Administration 4

Customer service, organisational skills and spread sheets.



## Why study Information Technology?

When you study information technology, you will learn the fundamentals of design, development, installation, and implementation of many types of computer information systems and networks. Possible careers that you might pursue in Information Technology include network engineer, systems administrator, analyst/programmer or web designer. There are currently tens of thousands of available jobs in IT in Australia (seek.com.au)

## Recommended Pathways

### A/V Course

Develops skills and knowledge required for entry into CIT courses and entry level employment.

### T/V Course

Develops skills and knowledge for CIT courses and university studies. This stream provides the assumed knowledge for IT based courses at university. These streams have content which leads to the completion of ICA20111 Certificate II in Information, Digital Media and Technology.

### Certificate II in Information, Digital Media and Technology

Students can gain competencies towards a Certificate II in Information, Digital Media and Technology through their IT course. The Certificate is awarded at the end of Year 12 on completion of 7 core competencies and 7 elective competencies, and a Structured Work Placement.

## Units

### Networking and Applications Stream

#### CISCO Networking A/T/V

Cisco Networking covers 2 semesters and follows the structure of the Cisco Discovery 1 and Discovery 2 classes which lead to CCNA certification. These units cover the following range of topics: advanced data communications, layered models, physical aspects of electronic communication, cabling, wireless networking, topologies, network design and documentation and the Internet.

#### Spreadsheets and Databases A/T/V

The Spreadsheets and Databases unit covers a range of topics from operating a spreadsheet package to advanced database usage, including: macros, exporting and linking spreadsheet data and charts with other software packages and databases, and what-if analysis. This unit also introduces students to the use of Relational Database Management Systems. Students will learn how to design and create record structures, data

management techniques, produce reports and graphs, create SQL queries and direct application of these skills to business record keeping.

### Systems Analysis, Design and Implementation T/V

Systems Analysis and Design refers to the tools and methods software engineers use to design new information systems. Students will investigate: different types of information systems; the systems development life cycle; structuring system requirements through conceptual data modelling and defining the steps of the conceptual schema design process.

Systems implementation covers the construction of a simple information system using a commercial relational database management system, writing and testing programs that meet specification requirements and data conversion strategies.

### Web and New Media Stream

#### Website Design A/T/V

In this unit students will develop the knowledge and skills to develop and create a simple to complex websites using HTML, JavaScript and Cascading Style-sheets. Topics covered include website and visual design principles, creating lists and tables, writing JavaScript routines, use of graphics files in websites and use of web page design tools. Students will extend their knowledge to creating interactive forms; creating images and navigation elements for websites; and using advanced features of a web authoring application for website design.

#### Web Applications A/T/V

This unit looks at creating web applications which integrate dynamic content sourced from a database into web pages. This will be achieved using the following skills: scripting languages such as PHP, ASP.Net, Ruby; database connectivity using ODBC, JDBC and ADO.NET; creating, reading, updating and deleting database records from a web form; managing security and authentication.

#### New Media Foundation A/T/V

This unit investigates the tools and techniques required for integrating a variety of new media content into websites and other applications. Topics covered include: understanding issues relating to file size, files types and download rates when incorporating files into websites; editing and optimising sound and video files for inclusion in websites; designing and creating complex animations for inclusion in websites and mobile applications.

## 2D Graphics and Animation A/T/V

This unit aims to develop knowledge and skills involved in creating and processing digital images and animations. Topics covered in this unit include: digital image capture and storage, digital image enhancement, manipulation and image crafting techniques, image file formats and vector and bitmapped images. 2D Animation focuses on the use of scripting to create interactive animations – including user control of animations.

## 3D Graphics and Animation A/T/V

3D Graphics and Animation aims to develop students as competent users of 3D modelling and animation software packages. Topics covered in 3D Modelling include: creating static 3D models using a range of techniques, applying materials and textures to 3D models, lighting and rendering 3D models using virtual cameras. Topics covered in 3D Animation include: understanding animating with key-frames and other animation techniques, animating a 3D scene, including models lights and cameras, adding sounds to 3D scenes, creating biped animation, and compositing video, sound and animation.

## Programming Stream

### Programming Foundation A/T/V

This unit introduces students to problem solving procedures, definition and representation of algorithms, problem solving by computer, the imperative programming paradigm and program testing and writing documentation.

Topics covered in this unit include systematic analysis of problems, and development of solutions and implementation of those solutions using a procedural programming language.

### Advanced Programming T/V

Advanced Programming aims to further develop the problem analysis and software development skills of students. Topics covered in this unit include: Object-oriented programming development methodologies, Classes, Objects, Inheritance, and diagramming techniques appropriate for object-oriented programming. Students will also learn how to create class packages, handle exceptions, create a model-view-controller user interface, event handling and concepts in multi-threaded programming.

### Games Programming A/T/V

Games programming introduces students to important concepts in developing computer games, and enables students to develop a simple computer game. Topics covered in this unit include: the history of computer games; game genres, social and ethical implications of computer games and future trends; game theory. Students will develop skills in designing, implementing,

testing and documenting an original game using a visual programming environment.

## Robotics & Intelligent Systems A/T/V

Robotics and Intelligent Systems aims to develop knowledge, skills and understanding of robotics and embedded systems. Robotics is a growing area in Information Technology, and an understanding of robotics is essential for future IT professionals.

Topics covered in this unit include: the history and contemporary context of robotics, ethical issues related to the application of robotics, robot construction methodology, and robotics programming skills. Students will develop skills in designing, constructing and programming robots to carry out simple and complex functions.

## IT Project A/T/V

An IT Project can be offered to students who have completed 3 of the 1.0 units offered in the Information Technology Course. The selection of a project for development is student-driven in consultation with the IT teacher. The unit requires the formal development, implementation and evaluation of a computing project using a programming language.

## Course Patterns

Students can choose from 3 streams to complete a major in Information Technology: Networking and Applications; Web and New Media; and Programming. A double major can be achieved by combining units from 2 or more streams. There are no prerequisites for the course in Information Technology, but some units do have prerequisites. Cisco Networking follows a tightly structured program, and Programming Foundation is the required entry point for subsequent programming units. Each semester unit consists of two half-semester (or term) units.

## H Course: Information Technology at the University of Canberra

The University of Canberra will offer an H Course in Information Technology from 2013. Students can study a specialised extension programme which will gain credit towards a first year IT Unit at UC, and studies can also contribute to a student's ATAR. This H Course is free of charge for students studying at UC SSC Lake Ginninderra.

# **International Studies**

## Global Studies A/T

This course aims to:

- Give you a greater understanding of yourself, your culture and your values
- Provide you with a sound general knowledge of Australia and our relationships with the rest of the World
- Give you the skills to analyse and critically evaluate these relationships
- Encourage you to develop a world view
- Give you a chance to delve into politics and international relations

Global Studies and Global Classroom are valuable for students who have an interest in politics, philosophy, journalism, diplomacy, cultural studies, science, legal studies, languages, humanities, economics, the arts, international relations, the United Nations and global citizenship.

## Course Patterns

Minor: 2 to 3 units

Major: 3.5 or 4 units

Major/Minor: 5.5 to 6.5 units

Double Major: 7 units or more

## Units

### Big Ideas and You

This unit will give students an understanding of what people know, think and believe. It will make students aware that there is more than one way to think about the world in which we live—how they can participate in and contribute to global communities.

### Australia: Our Democracy, Your Choice

This unit will enable students to acquire knowledge and understanding of Australia's democratic political landscape, the history that contributed to its formation and to become reflective, informed and active citizens. This unit is delivered in partnership with the Museum of Australian Democracy (MOAD)

### Australia in the World

This unit aims to provide students with a basic knowledge of what it means to be an Australian citizen, living in and participating in, an increasingly globalised world. Students will also consider our history, national identity and diverse culture and how this shapes our interactions with the rest of the world and influences future relationships.

### Forces of Cultural Change within Asia

This unit aims to equip students with the knowledge and skills to explore and analyse contemporary issues in Asia through the prism of historical events that helped shape the social, economic and political structures in society.

## Cultural Identity in Asia

This unit aims to expand research and analytical skills by conducting in depth investigation and evaluation of current issues in Asia. The focus is on countries with a particular relevance to Australia.

## International Relations

The interrelations of nations and global bodies This unit maps out the bodies, organisations and agencies of power and influence across the world. Students will explore the major motives for action and inaction, and the major causes of division and alliance.

## Peace and Conflict Studies

This unit explores different kinds of conflict throughout the world. Students will examine the history and nature of conflict, causes of conflict today and the challenges of peaceful resolution.

## The Americas and the Caribbean

In this unit, students will gain a full appreciation of where the people and nation-states of these regions have come from as well as why they are where they are today. Studies focus on the Americas and the Caribbean, Students will explore the impact of early colonial influences through to the modern day affecting the socio-geo-political background in these regions.

## Global Challenges

This unit consolidates knowledge and skill gained in the initial units of the course by putting theory into practice. This is a 'hands on' approach where students will explore possible solutions to existing community issues and communicate their ideas to others. Extra curricular activities such as community activism are integral components of the course.

## Independent Study Unit

This independent research unit is available to students who have demonstrated high conceptual, cognitive and organisational outcomes in at least three previous units.

### Extra-curricular:

#### Global Classroom (R unit)

Global Classroom is a registered unit (students are given credit points towards their Year 12 Certificate)

Run exclusively at UCSSC LG in conjunction with the Scottish Department of Education, the program consists of a network of international schools committed to Global education.

## International excursions

Excursions are arranged to enable participation in the Global Classroom Conference every year.

# Languages

# Languages

## Languages T

The following languages may be studied at UCSSC Lake Ginninderra :

Chinese (T)

French (A/T)

Italian (A/T)

Japanese (A/T)

Spanish (A/T)

A study of languages will:

- develop written and oral communication skills;
- provide an important edge in future employment and prepare students for the global labour market, establishing them as credible educated people when overseas;
- develop a sensitivity and understanding of other cultures;
- prepare students for a range of careers in translation and interpretation, tourism and hospitality, Foreign Affairs and Trade, Immigration, retail and community services;
- prepare students for further study at CIT/TAFE and university;
- help students to think globally;
- enhance learning strategies and intellectual growth.

All languages are structured to include a variety of modules covering themes such as travel, concerns of young people, the environment, entertainment, etc.

## Note

The availability of courses in any given year will depend on the number of students wishing to enrol.

Language courses are divided into four levels and the entry requirements differ based on language knowledge and experience.

## Beginning Courses

are intended for students who have no previous knowledge of the language. Some Beginning level courses are available at T and A level.

## Continuing Courses

are intended for students who have completed two or more years of study of the language. Previous knowledge of the language is necessary.

## Intermediate Courses

are possible for some students and are comprised of the final units of a Beginning course and the first two units of a Continuing course.

## Advanced Courses

are intended for students who have near native fluency.

## Language Course Patterns

### Minor

2 units of the same course.

### Major

3.5 or 4 units of the same course.

## Beginning Courses

These courses aim to develop communication skills, both spoken and written for the purpose of further study, travel, enjoyment or work. The Asian languages give particular emphasis to learning the fundamentals of script writing. Students are introduced to the way of life and culture of the people of the target language.

## Continuing Courses

The further development of communication skills, both spoken and written for the purpose of further study, travel, enjoyment or work is the focus of these courses. They aim to extend students' understanding of the way of life and culture of the people of the target language.

## Advanced Courses

Designed for those students who have near native fluency in the target language, or who have spent a considerable time in the countries where the language is spoken and have been educated through the language, these courses consolidate and further develop communication competence and linguistic control.

Cultural issues of the target language are examined at a more sophisticated level. Particular emphasis is given to responding critically and/or creatively to a variety of texts, both written and visual.

# Mathematics

# Mathematics A/T

## MATHEMATICS A/T

The study of mathematics is not compulsory but is vocationally very important and is a prerequisite for study in many courses at university and CIT.

Having decided to study mathematics, you will need to choose carefully the course which best suits your needs. Before making this decision you should talk to your maths teacher at high school, college maths teachers, and careers advisers. You should consider:

- your ability and interest in mathematics
- your performance in Year 10 mathematics
- the mathematical requirements of your career choice

There are four courses in mathematics:

**Mathematical Applications T**  
**Mathematical Methods T**  
**Specialist Mathematics T**  
**General Mathematics A**

Note that it is possible to change maths courses in Year 11 if an inappropriate choice has been made.

## MATHEMATICAL APPLICATIONS T

This course is designed to provide background for students wishing to enter university or TAFE studies in subjects which involve the use of some but not a great deal of mathematics. Such subjects include Nursing, Psychology, Sociology, Education, Administration and Laboratory Technology.

Students who enrol in this course should have demonstrated an interest and a reasonable level of achievement in high school mathematics studies. The course places less emphasis on algebraic skills and abstract thinking than does the Mathematical Methods course.

### Course Patterns

Students can complete a major or a minor. This course is sequential - you must complete the earlier units before the later ones.

### Units

#### MA1 - Matrices, Sequences, Series and Mensuration

- Matrix Manipulations - Representing information as a rectangular array of numbers.
- Sequences and Series - Arithmetic and Geometric Sequences and Series, financial applications.
- Mensuration - Perimeter, Area and Volume, includes design and construction applications.
- Applied Trigonometry - Right angled and non right angled triangles, includes bearings and navigation applications.

#### MA2 - Modelling, Matrices and Networks

- Linear Modelling - Sketching straight line graphs, including simultaneous equations.
- Linear Programming - The optimisation process and its components in a range of contexts.
- Non linear models - Parabolic and exponential applications.
- Matrix Applications - Transformations, dominance and transition matrices.
- Graphs and Networks - Planar graphs and Directed Graphs and Networks, includes construction and transport applications.

#### MA3 - Financial Modelling and Trigonometry

- Financial Arithmetic - Income, Taxation, Budgeting and Expenses.
- Interest and Depreciation - Credit cards, simple and compound interest and break-even analysis.
- Reducing balance loans - Loan schedules /annuities.
- Ratio and Proportion - Similar figures and scale.
- Applications of Geometry and Trigonometry - Bearings, triangulation, surveying, mapping and earth geometry.

#### MA4 - Statistics and Probability

- Statistics - Representing univariate and bivariate data using graphs and statistics. Correlation and regression.
- Probability - Simple and compound events, permutations and combinations and the binomial distribution.

## MATHEMATICAL METHODS T

The Mathematical Methods course is designed to prepare students for university studies in subjects such as Information Technology, Accounting, Commerce and Applied Sciences, which involve a significant amount of mathematics, including calculus.

It is expected that students who enrol in this course will have demonstrated a reasonable level of aptitude and achievement in previous school mathematics studies. The course has a challenging level of algebra content, so it is very important that students who choose it have a confident and positive approach to algebra.

### Course Patterns

Students can complete a major or a minor. The units in this course should be studied sequentially.

### Units

#### MM1 - Numbers, Patterns and Relations

- Real Numbers - Structure and field laws.
- Algebra Review - Simplifying and Factorising, linear and quadratic equations

# Mathematics A/T

- Matrices - Operations, inverses and matrix equations.
- Sequences and Series - Arithmetic and geometric sequences and series including applications.
- Functions and Relations - Graphing linear and quadratic functions. Recognition of other functions.

## MM2 - Introductory and Differential Calculus

- Polynomials and Rational Functions - Graphing, rates of change and limits.
- Trigonometry - Angles of any magnitude, radians and solving trig equations.
- Differential Calculus - Gradient of the tangent, stationary points and applications.

## MM3 - Integral Calculus and Special Functions

- Integration - Fundamental theorem and approximation, definite and indefinite integrals including applications.
- Special Functions - Exponential graphs and logarithms, calculus of trig, exponential and log functions; growth and decay.

## MM4 - Probability, Statistics and Applications

- Statistics - Measures of central tendency, measures of dispersion, normal distribution, correlation and regression.
- Probability - Permutations, combinations, theoretical and experimental probability, simple and compound events.
- Applications (could include) - Business Applications, Further Statistics, Geometry, Matrix Applications and Further Trigonometry.

## SPECIALIST MATHEMATICS T

The Specialist Mathematics course is designed to prepare students for university studies which assume a high level of understanding of, and creativity in, mathematics. Such studies include scientific research, Actuarial Studies, Engineering, Economics and Mathematics itself.

It is expected that students who enrol in this course will have demonstrated a very high level of aptitude and achievement in previous school mathematics studies.

### Course Patterns

Students can complete a minor, major, major-minor or double major in Specialist Mathematics. It is expected that the minor and the major in this course will consist of the first two and first four of the core units, respectively.

A major-minor or double major will generally consist of the four core units and sufficient of the option units. The core units must be studied sequentially. The option units are generally discrete and students may enter the option stream in any semester, with the agreement of

the Faculty. Not all option units will be offered to every cohort.

Students who show outstanding ability in mathematics will be encouraged to enrol at ANU College in mathematics. Units completed at ANU College will be reported on the student's ACT Year 12 Certificate and may contribute to the calculation of the student's Australian Tertiary Admissions Index (ATAR).

### Core Units

The core units in the course present a deeper and more challenging treatment of the topics in the corresponding Maths Methods units.

### Core Units

#### SM Numbers Patterns and Relations

- real numbers, algebra review, matrices, sequences and series, functions and relations, linear and quadratic functions

#### SM Trigonometry and Derivatives

- Polynomials, rational functions, trigonometry, rates of change, limits, differential calculus, geometric applications of differentiation

#### SM Integrals and Special Functions

- Integral calculus, applications of integration, exponential functions, logarithmic functions, calculus of the trig, exponential and logarithmic functions, inverse trigonometric functions

#### SM Probability and Statistics

- Probability, statistics

### Extension Units

#### SM Reasoning and Number Theory

- Reasoning, logic, proof patterns, composition of numbers, congruencies, Diophantine equations, introduction to group theory

#### SM Geometry and Further Matrices

- language and structure, points and lines, angles, triangles, quadrilaterals, matrix algebra, matrices and transformations

#### SM Co-ordinate Geometry, Conics

- Gradient, equations of a straight line, intersection of lines, perpendicular distance, co-ordinate, methods in geometry, conic sections – circle, parabola, ellipse, hyperbola, chords, tangents and normals, applications

## SM Complex Numbers

- complex numbers, operations, Argand diagram, modulus and argument, powers and roots, polynomials over  $\mathbb{C}$ , Fundamental Theorem of Algebra, curves and regions in the Argand Plane

## SM Further Trigonometry

- reciprocal ratios, graphs and properties, compound angle formulae, double angle formulae, sums to products/products to sums formulae, half angle formulae,  $t$  formulae, trig identities, trig equations

## SM Vectors

- vector definitions and notations, vector operations, scalar, vector and triple products, resolution of vectors, angle between vectors, applications in analytical geometry, vector valued functions

## SM Further Calculus

- calculus of the inverse trig functions, integration techniques, substitution, parts, partial fractions, use of trig and algebraic identities

## SM Series, Differential Equations

- convergence and divergence of sequences, infinite series – tests for convergence, power series, first order differential equations

## SM Kinematics, Vector Calculus

- straight line motion of a particle, various formulations of acceleration, velocity and displacement, velocity-time graphs, position vector as a function of time, calculus of vector, valued functions, applications to curvilinear motion in 2 and 3 dimensions

## SM Dynamics

- Force, Newton's Laws, resolution of forces, friction, straight line motion subject to constant and variable forces, vertical motion both with and without air resistance, projectile motion, simple harmonic motion, circular motion

## SM Linear Programming

- variables, constraints, objective functions, feasible regions formed by constraint inequations, optimising linear objective functions, theory and use of the simplex method, pivoting and the duality principle

## SM Graphs and Networks

- Terminology, fundamental results, graph isomorphisms, adjacency matrices, journeys on graphs, planar graphs and Euler's formula, trees and algorithms

## GENERAL MATHEMATICS A

A courses meet the needs of students who either wish to enter occupations or continue training in areas that require the use of basic mathematical and statistical techniques.

A courses emphasise practical applications of the mathematics studied.

Students may complete a minor or a major. A courses are not sequential. Students may enter the course in any semester

### Units

#### Statistics and Measurement

- representing data, analysing data, introduction to measurement, Pythagoras' Theorem, trigonometry, surveying

#### Applied Graphs and Statistics

- modelling relationships, rates of change, linear proportions, other types of graphs, exponential graphs, scatterplots and time series, populations and samples, statistics and probability

#### Mathematics of Finance and Travel

- earning money, taxation, spending money, consumer credit, public transport, buying and, owning a car, reading maps, travel in Australia and overseas

#### Chance and Planning Estimation

- introduction to probability, calculating probabilities, games of chance, construction plans, beginning construction, finishing construction

#### Retail and Navigation Mathematics

- working with variables, cash handling, percentages in industry, simple interest, ratios and proportions, basic personal finance, earth geometry, water navigation, land measurement

## MATHEMATICS COMPETITIONS

Students are encouraged to participate in a number of Mathematics Competitions; including: ACT Year 12 Maths Day at ANU, University of NSW Maths Competition, Australian Maths Competition Westpac Awards.

# Physical Education

# Exercise Science (formerly Human Movement) T

## Exercise Science T

This course is relevant to students who intend to pursue tertiary studies in teaching (physical education), nursing, recreation, physiotherapy, occupational therapy, sports science and applied anatomy and physiology.

Course content is based on the applied sciences of anatomy, physiology, and the biomechanical analysis of movement, including sporting activity. The course also focuses on the acquisition of motor skills fitness and nutrition and certain areas of the behavioural sciences.

## Course Patterns

This course is not sequential. Students wishing to join the course after Unit 1 will be admitted to the course at the discretion of the head of faculty. However, it is preferable for students to complete the units in the order set out below.

## Units

The units outlined below are semester length (value 1.0) and comprise two half-semester units (value 0.5)

### Unit 1

#### Anatomy and Physiology

##### Basic Anatomy and Physiology

Students study the basic organisation of the human body (cells, tissues, organs, systems) and then study in more depth the structure and function of the circulatory and respiratory systems.

##### Functional Anatomy and Physiology

Students become familiar with anatomical and movement terminology and study the structure and function of the skeletal, articular, muscular and nervous systems. Movement analysis is then carried out through the study of muscles and the actions involved in particular exercises.

### Unit 2

#### Sports Performance and Nutrition

##### Sports Performance

Students study the importance of fitness and identify various aspects of physical fitness such as components of fitness, methods and principles of training, and methods of measuring and evaluating these components. Practical sessions involve measuring and evaluating

aspects of fitness and conducting and participating in training sessions and programs.

#### Sports Nutrition

Students study the workings of the digestive system and the relationship between food intake and energy expenditure. Students will also study the importance of a balanced diet and sound nutrition practice for the athlete.

### Unit 3

#### Exercise Physiology and Sports Medicine

##### Exercise Physiology

Students revise the nervous system and examine muscular contractions, the interdependence of the three energy systems during physical activity and the physiological responses and adaptations of the body to exercise and training. Practical experiments and measurements are important features of this unit.

##### Sports Medicine

Students examine various types of sports related injuries, their causes, prevention, treatment, management and rehabilitation. Basic first aid procedures and taping techniques will also be covered.

### Unit 4

#### Biomechanics and Sports Psychology

##### Biomechanics

Students define and apply principles of physics relating to bodies in static and dynamic situations and examine the significance of the laws of motion e.g. forces, gravity, levers, velocity. Through practical involvement and observation students will gain an understanding of the physical principles relating to human movement.

##### Sports Psychology

Students research such topics as motivation and athletic performance, goal setting and tactics, stress management, the relationship between arousal and attention focus, and mental preparation including motor imagery in sport and personality theory.

## Physical Education A

Physical Education A is a practical activity based course aimed at students who enjoy regular physical activity. This subject is for those students concerned about personal fitness who are interested in experiencing various recreational and sporting activities with a strong emphasis on active participation.

### Units

#### Coaching Junior Sport and Individual Sport

Students will develop an understanding of basic coaching principles and develop practical coaching skills in order to receive the Level 0 Coaching Accreditation. Students will also be exposed to a variety of skills in various individual sports and develop an understanding of the components of individual performance.

#### Racquet Sports and Recreation Activities

Students are exposed to a variety of skills, techniques and tactics used in a variety of racquet sports. Students will also gain an understanding of the benefits of leisure and recreation through participation.

#### Football Codes and Team Sports

Students demonstrate individual and team skills in a number of football codes and team sports. They will also gain an understanding of the rules, tactics and positional skills in these sports.

#### Fitness Activities and Modified Sports

Students will develop and understanding of the concept of physical fitness, identifying the components of physical fitness and ways of measuring them. Students will also learn about the relationship between modified sports as a learning tool for traditional sports and be exposed to a range of modified sports.

## Sports Specific Practical R

This course is designed to provide opportunities for active participation in high standard competition. Students will be able to train and participate in sessions scheduled on-line during the school day, developing both individual and team skills. The areas to be covered in this course include individual skills, personal fitness, team skills, coaching and refereeing.

Students will be expected to play for the college in local, interstate and possibly international competitions.

Both the Basketball and Volleyball school teams have travelled to China and New Zealand to compete against top sporting schools while immersing themselves in local culture.

## Basketball

The College Basketball program has an outstanding record with success in competitions at local, national and international level.

The men's and women's Lakers have won the Champion School of Australia competition a number of times. The women won the title in 1988, 89 and 1990 whilst the men have won the championship in 1997, 2000, 2001 and 2007.

Students taking part in the basketball unit have the opportunity to train on a line of the timetable, developing their individual skills and allowing team preparation for competitions.

## Volleyball

Students taking part in the Volleyball unit have the opportunity to train, develop their individual skills and allow team preparation for School, State & National competitions. Students will also be expected to attend local high school training sessions.

AIS Volleyballers and numerous state players attend the college. As a result the college teams are extremely strong at a local and National level as evidenced by winning National titles at Australia's largest school tournament in Melbourne each December. In 2013 the school will again travel to NZ to compete against top sporting schools.

## Futsal

This unit provides students with the opportunity to develop skills in Futsal and for the college teams to prepare for competition.

The college men's team have won the national schools championship on two occasions and the women won the NSW/ACT championship. The college's Futsal teams will focus on the ACT college competition, the NSW schools regional tournaments and the National Schools Cup.

## Rugby Union / League

Students enrolled in the rugby program will have the opportunity to focus on individual and team skills, personal fitness, coaching and time management in both rugby union and rugby league.

In 2002 the college rugby team won the ACT colleges competition and in 2001 the team reached the quarter finals of the World Schools Tens Tournament in Sydney. In 2011 & 2012, the school made the final of every League and Union competition across the year.

The rugby program involves a number of competitions and students involved in the program will be expected to play for the college.

## Sports Fitness & Administration A/V

Students studying this course will have a keen interest in developing their knowledge and skills in the sport and recreation field. They will have the opportunity to develop their competencies both within the college environment through simulated experiences and scenarios as well as on the job training and assessment.

Students will develop a good understanding of the sport and recreation industry and the career pathways this industry can provide. This course will be directly applicable to further study at tertiary institutions and with private providers. Students who prefer a 'hands on' approach to study will find this course attractive.

### Units

#### The Sport Industry, First Aid and Sports Trainer

Students will explore the sport and recreation industry, including the role of different industry sectors and key legislation. Students will also learn to provide essential first aid.

They will gain skills to recognise and respond to an emergency using basic life support measures and to follow immediate injury management strategies in a sport setting. Students will gain competencies towards the Certificate II in Community Recreation.

#### Sports Coaching

Students will apply coaching practices and styles in a variety of sporting fields. Students will investigate the legal and ethical responsibilities of a coach and accepted coaching practices.

Students will also implement basic warm-up, stretching, cool-down and recovery programs necessary for clients participating in any physical activity program. Students will gain competencies towards the Certificate II in Community Recreation.

#### Fitness

Students will develop basic fitness programs for fitness industry clients. They will explore basic exercise science required for fitness instructors.

Students will also take clients through a process of screening, a discussion of fitness goals, and a basic fitness appraisal to design a fitness program. Students will gain competencies towards the Certificate II in Sport and Recreation.

## Sport and Recreation Management and Administration

Students will assist in conducting and supervising sessions within the sport and recreation industry. They should be able to identify and respond to clients at risk in a community recreation environment. They will also design and monitor the participation of volunteers in sport clubs and/or organisations. Students will gain competencies towards SRC20206 Certificate II in Community Recreation. (Scope is being sought in 2012 for SIS20310 Certificate II in Sport and Recreation)

### Structured Workplace Learning

Towards the end of the Sport and Recreation course, students may be offered a Structured Workplace Learning opportunity. This will be a week long placement within the Sport and Recreation Industry, allowing students to gain required competencies toward the Certificate II.

Students not completing the Certificate I will receive a Statement of Attainment listing the competencies



achieved.

## **Sports Studies T**

This course is aimed at students who are considering a career in sport or the fitness/recreation industry. Sports Studies topics include sports coaching, fitness training, social issues in sport, skill acquisition, sports administration, business and marketing, recreation, leisure and ethical issues.

The course will have a practical orientation and will enable students to focus on vocational opportunities by completing coaching awards, gaining experience in sports administration and participating in selected work experience placements.

It is expected students enrolling in this course will have a strong background and interest in sport and recreation.

## **Sports Coaching**

Students will examine and identify the Level One (1) Coaching Principles as described in the Beginning Coaching workbook. They will understand the role and responsibilities of a coach and qualify for their Level One (1) Coaching Principle Award.

## **Sport, Recreation, Leisure and Ethical Issues**

Students will analyse and interpret the concept of leisure and recreation activities as well as critically analyse the links between sport, play, recreation and leisure. They will define the benefits of regular exercise and be able to recognise and critically analyse the relationship between sport and the law.

## **Social Issues in Sport and Skill Acquisition**

Students will investigate and critically evaluate a variety of sociological patterns in sport and describe specific social groups in sport.

They will examine current issues in sport and discuss and analyse the factors which affect the participation of specific groups in sport. Students will also explore and analyse the socio-cultural elements of Australian sport.

## **Sports Administration, Business and Marketing**

Students will identify and discuss administrative issues that relate to organising simple sporting competitions. They will actively assist in the organising / administration of a sport program or event at a local feeder primary or high school.

## **Sports Administration, Business and Marketing**

Students will investigate and critically evaluate a variety of sociological patterns in sport and describe specific social groups in sport.

They will examine current issues in sport and discuss and analyse the factors which affect the participation of specific groups in sport. Students will also explore and analyse the socio-cultural elements of Australian sport.

## **Sport, Recreation, Leisure and Ethical Issues**

Students will examine and identify the Level One (1) Coaching Principles as described in the Beginning Coaching workbook. They will understand the role and responsibilities of a coach and qualify for their Level One (1) Coaching Principle Award.

## **Sports Science H**

A university course, Sport Science Foundations H, is expected to be offered in 2014. The course will provide students with a pathway into UC Sport Studies courses.





# Outdoor Education

## Outdoor Education A/T/V

An action packed course that is extremely popular. Leading the way in Outdoor Education this is the only course of its type in the ACT NSW region. Students undertake tertiary and vocational study. The course is designed to provide an opportunity to gain SIS20210 Certificate II in Outdoor Recreation. while completing a tertiary major.

There is a balance of theory and practical. Content includes recreation skills (snowboarding, caving etc.), knowledge of the natural environment (marine, alpine, bush, caves etc.) and personal and interpersonal skills.

This course is aimed at students who have an interest in outdoor recreation and the natural environment, or who may be considering careers in the recreation/ environment or related industries or who wish to add some challenging and fun activities into their academic program.

This may include entry to various outdoor education, recreation or environmental studies courses at university, teaching courses with a recreation component, recreation leadership courses at CIT, tourism, land management, resort employment, parks and wildlife, defence forces, etc.

### Course Patterns

A major or minor must include Outdoor Education 1 and Outdoor Education 2.

It is recommended that units 1 to 4 be studied in sequence. It is possible to complete a major minor course.

Students not completing a vocational certificate will receive a Statement of Attainment listing the competencies achieved.

### Units

#### Outdoor Education 1 (Year 11/12)

##### Fundamentals and the Ocean

Students will develop knowledge and skills in relation to marine recreation activities including snorkelling, surfing and/or scuba diving, underwater physics and human physiology, environmental conditions and demonstrate minimal impact practices whilst participating in supervised outdoor activities.

#### Outdoor Education 2 (Year 11/12)

##### Risk Management and Snow

Students will examine the principles of risk management relating to outdoor recreation and demonstrate knowledge, skills and experience of first aid, Occupational Health and Safety and emergency procedures relating

to outdoor recreation activities.

Students will also refine and extend their personal and interpersonal skills as a result of their participation in and reflection on alpine recreation activities.

#### Outdoor Education 3 (Year 12)

##### Leadership and Rock

Students will develop their personal and interpersonal skills in leadership of outdoor recreation activities. They will gain knowledge and skills to safely participate in rope based recreation activities. They will also explore the natural processes operating in cliff, cave and canyon environments and human impacts on these processes.

#### Outdoor Education 4 (Year 12)

##### Wilderness and the Bush

Students will examine and explore concepts of wilderness. They will demonstrate knowledge and skills to safely participate in bush recreation activities. They will also explore the natural processes operating in bush environments and human impacts on these processes.

##### Field Trips

Typical field trips include:

- SCUBA and snorkeling (Jervis Bay and Merimbula)
- Climbing (ACT, Nowra, Point Perpendicular)
- Backcountry skiing, boarding (Snowy Mountains)
- Downhill snowboarding, skiing (Perisher/Thredbo)
- Hiking (Snowy Mountains, Budawang)
- Caving (Bungonia and Wee Jasper)
- Canoeing and kayaking (Clyde River)
- Canyoning (Blue Mountains)
- Mountain biking (Brindabellas)
- Multi Sport Adventure

##### Adventure Plus Program

A unique extension and enrichment program incorporating regular outstanding adventure opportunities

Nullarbor Caving

Barrier Reef Diving

Japan Skiing and Snowboarding

Arapiles climbing

Mungo Journey

Students must apply to join this program.

# Outdoor Education A

## Outdoor Education A additional units

These units will introduce students to a wide range of outdoor experiences such as snorkelling, surfing, scuba diving, bushwalking, rock climbing, canoeing, snowboarding and cross country skiing and may be taken separately or in addition to the A/T/V course.

Students will also develop skills in navigation, first aid, survival and leadership. In addition to a course fee, other costs are incurred for the First Aid examination, excursions and equipment hire. Costs are kept to a minimum.

### Course Patterns

Students are free to complete a selection of the following units. Students often complete some of these units as enrichment and extension of the T/V course.

### Units

All units listed below have a value of 0.5, except for Expedition and Marine Expedition, each having a value of 1.0.

#### Canyoning

In this unit students learn to apply safe procedure as a member of a canyoning team, assess and prioritise their needs for canyoning, demonstrate an understanding of and ability to apply the attitudes and techniques vital to safe and enjoyable participation in canyoning and related rope activities and safely and confidently apply basic skills of movement in canyons.

Students also demonstrate an understanding of the special nature of the canyon environment and how to care for it.

#### Caving/Vertical Caving

In this unit students learn to carry out safe procedure as a member of a caving team, assess and prioritise their needs for caving, demonstrate an understanding of and ability to apply the attitudes and techniques vital to safe and enjoyable participation in caving and related rope activities.

Students safely and confidently apply basic skills of movement in caves, demonstrate an understanding of the special nature of the cave environment and how to care for it and demonstrate a minimal impact conservation ethic.

#### Rock Climbing

In this unit students learn to carry out safe procedure as a member of a climbing team, assess and prioritise their needs for climbing, demonstrate an understanding of and ability to apply the attitudes and techniques vital to

safe and enjoyable participation in climbing and related rope activities.

Students safely and confidently apply basic skills of movement on rock, follow general safety precautions at a climbing site, use and understand climbing signals and terminology and gain experience in top rope climbing and some seconding. Extension units: Seconding, Lead Rock Climbing.

#### SCUBA/Advanced SCUBA

In this unit students learn to assess and prioritise their needs for scuba diving, demonstrate an understanding of and ability to apply the attitudes and techniques vital to safe and enjoyable participation in scuba diving and related activities and successfully complete the requirements necessary for the awarding of a recognised open water scuba diving certificate. Extension unit: Advanced Scuba.

#### Surfing

In this unit students learn to assess and prioritise their needs for surfing, demonstrate an understanding of, and ability to apply the attitudes and techniques vital to safe participation in surfing and related activities and demonstrate at all times and in all situations a minimal impact conservation ethic.

#### Alpine Skiing

In this unit students demonstrate a basic understanding of equipment, clothing, safety procedures, resort layout and emergency procedures and demonstrate an understanding of and ability to apply the attitudes and techniques vital to safe and enjoyable participation in alpine skiing and related activities.

#### Snowboarding/Advanced Snowboarding

In this unit students demonstrate a basic understanding of equipment, clothing, safety procedures, resort layout and emergency procedures and demonstrate an understanding of and ability to apply the attitudes and techniques vital to safe and enjoyable participation in snowboarding and related activities.



## General Units

### Expedition (value 1.0)

In this unit students learn to work with a group to plan and take part in an expedition of at least six days duration.

Students assess and prioritise their needs for an expedition, develop specific fitness and skills and knowledge in preparation for an expedition experience and review and evaluate their planning process.

Students demonstrate an understanding of and ability to apply the attitudes and techniques vital to safe and enjoyable participation in the expedition activities and they further refine and enhance existing outdoor skills and apply these skills in situations requiring progressively greater technical skill.

*Typically this unit incorporates the Japan Snowboard and Ski trip or caving on the Nullarbor.*



### Marine Expedition (value 1.0)

In this unit students learn to assess and prioritise their needs for an extended snorkel/scuba diving trip. They further refine and enhance existing scuba diving skills and apply these skills with the emphasis on safety, enjoyment, environmental awareness and sensitivity.

Students refine and extend their personal and interpersonal skills as a result of their exposure to a variety of achievable yet demanding and challenging situations.

Students identify a range of marine life and gain an understanding of their habitats, interrelationships and other factors affecting each organism's existence.

Students gain an awareness of the fragile nature of marine ecosystems and a sense of responsibility for the care and preservation of nature.

*Typically this unit incorporates the Lady Musgrave Island Barrier Reef trip.*



# Science

## Biology T

This practical course enables students with an interest in Biology to study it at an advanced level. It is appropriate for students intending to pursue careers in areas such as physiology, nursing, paramedical or medical sciences, wildlife biology, zoology, botany, genetics, biochemistry, forestry, and environmental sciences.

### Course Patterns

The first unit in Year 11, Introductory Biology, is compulsory. There is choice available between following units which will be offered according to student demand.

Students complete two units as a minor or may continue with units in Year 12 to complete a major or major-minor. A major may entitle you to advanced standing in selected courses in CIT.

### Note

Biochemistry is common to both Chemistry and Biology and may be included in either course but not both.

### Prerequisites

None, but Science to Year 10 an advantage.

### Units

#### Year 11

##### Introductory Biology

(incorporating Cells and the Microscope and Biochemistry and Cellular Processes)

In this unit you will be given an introduction to Biology with no assumed knowledge. Topics to be covered include history of the cell, plant and animal cells, organisation of cells into tissues, microscopy, basic biochemistry and cell processes.

##### How Living Organisms Function

(incorporating Nutrition, Excretion and Transport and Gas Exchange, Support and Movement)

In this unit you will examine the functional and structural characteristics of organisms. Major biological processes necessary for the maintenance of life are also studied. Topics include nutritional requirements, digestion, excretion, transport systems, gas exchange, bones and muscles.

#### Year 12

##### Co-ordination, Reproduction and Disease

(incorporating Co-ordination, Reproduction, Pathogens and Disease)

In this unit you will cover in detail nervous and sensory systems in animals, endocrine systems in animals, hormonal responses, reproduction at cellular level, reproduction in mammalian and other animal groups, reproduction in flowering plants.

A study of infection and disease is also covered in this unit and includes pathogens, defence mechanisms, immune system, human disorders and diseases and prevention of such.

##### Introductory Genetics

(incorporating Principles of Genetics and Principles of Natural selection)

You will explore the mechanisms of inheritance, genes, DNA, mitosis and meiosis, and the causes of variation, both genetic and environmental. Theories on the origins of life and the history of the earth and life are also covered.

##### Applied Genetics

(incorporating Genes in Action and Evolution)

In this unit you will further develop your understanding of genetics to include gene mutations, mutagens, genetic engineering procedures.

The consequences for society of developments in modern biology including advances in biological technology are also considered. The consequences for society of developments in modern biology including advances in biological technology are also considered.

##### The Nature of Ecosystems

(incorporating Ecosystems and Populations and Australia Over Time and Human Population)

In this unit you will study the different types of ecosystems including their living and non-living components. In addition, you will cover interactions between organisms and their environment and their complex relationships with other organisms.

Focus will be on Australian ecosystems, introduced species and their impact on ecosystems. Human population growth will also be addressed.

## How Ecosystems Work and Human Impact

(incorporating Ecosystems - Cycles and Energy Transfer and Ecosystems - Impacts and Solutions)

This unit of work continues on with your understanding of ecosystems by exploring cycles and energy transfer in nature.

You will cover important processes such as succession and global warming, soil acidification and deforestation. In addition, conservation of plants and animals and the need to sustain wilderness areas will be discussed.

## Research Biology

This unit will be a student-centred research activity which will provide students with the opportunity to examine a problem in biology of their own choosing.

## More About Biology

Biology is the scientific study of living organisms and their environment.

The course will enhance your understanding of the natural world and the place of people and other organisms within it. It includes knowledge and curiosity about human life and health, how humans interact with the natural world and the need to sustain the complex interactions that make possible the diversity of life on Earth.

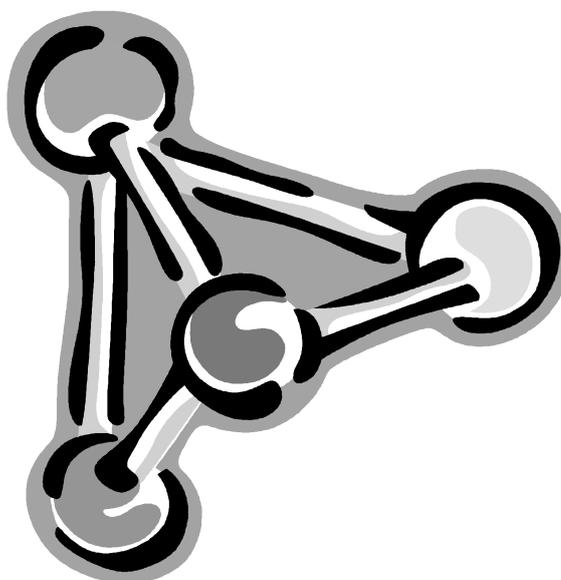
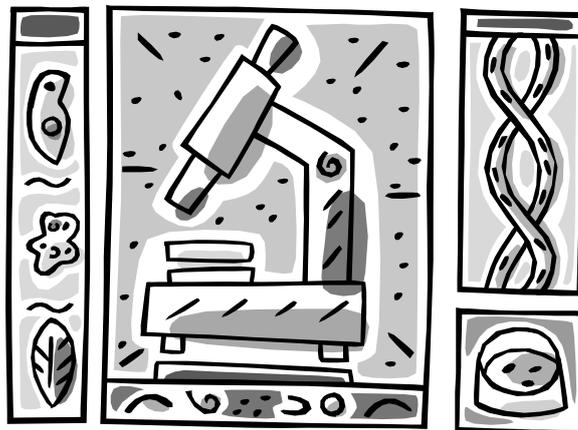
Developments in technology, including biotechnology, have presented society with the need to make decisions about a range of public issues such as conservation, management of resources, genetic engineering, reproductive technology and medical research.

The study of Biology will assist you to make decisions in these controversial areas and help you contribute to informed debate.

You will find the study of Biology enjoyable and relevant to your life and its broad base can lead to employment and /or further study.

There is an ecological strand with The Nature of Ecosystems and How Ecosystems work and Human Impact. There is also a strand with a human biology focus with units in Introductory Genetics and Applied Genetics.

Special interest options for the chemically minded are catered for with Biochemistry. The Research in Biology unit available to any student as an extension unit for further study.



# Chemistry T

## Chemistry T

Chemistry is an essential choice if you intend to proceed to tertiary level study in almost all fields of science, engineering and health sciences. The chemistry course allows students to select units during Year 12 according to their interests and includes a more student directed research option for those who demonstrate very good progress in Year 11.

Students wanting an overview of the subject should study a Minor comprising of the two Year 11 units. Those wishing to prepare adequately for tertiary studies in related areas should complete a major.

### Course Patterns

This course is sequential in Year 11.

Minor - Introductory Chemistry and Acids, Redox and Organic Chemistry.

Major - The above units, Physical Chemistry and at least one other 0.5 or 1.0 unit.

Major/Minor - The above major requirements plus units to accrue at least 5.5 units.

*(This option will only be available if there are sufficient enrolments to form two different classes in year 12.)*

Prerequisites are Level 1 or the upper grades of Level 2 Year 10 Science and Maths.

### Note

This course cannot be studied as well as the General Science course. Biochemistry is common to both Chemistry and Biology. These units can be counted towards either course, but not both.

### Units

#### Year 11

Introductory Chemistry  
Acids, Redox and Organic Chemistry

#### Year 12

Physical Chemistry  
Biochemistry  
Industrial Chemistry  
Environmental Chemistry  
Analytical Chemistry  
Forensic Chemistry  
Electrochemistry  
Extended Research

## Introductory Chemistry

(incorporating Introduction To Chemistry and The Mole, Water & Reactions in Solution)

In this unit you will study matter and materials, separation techniques, chemical changes, introductory atomic structure and the periodic table, elements, compounds and chemical formulae and equations, bonding and properties, metals, ionic and covalent substances, solubility, the mole and concentration of solutions, stoichiometry and solubility.

## Acids, Redox and Organic Chemistry

(Incorporating Acids & Redox and Organic Chemistry)

In this unit you will study acids and bases redox reactions, corrosion, electrochemical cells, the electrochemical series, organic chemistry and polymers.

## Physical Chemistry

In this unit you will study the kinetic molecular theory, the gas laws, development of atomic theory and modern views on atomic structure, reaction kinetics and catalysis, chemical equilibrium - acid-base and solubility and thermochemistry.

## Analytical Chemistry

(incorporating Introduction to Chemical Analysis and Advanced Analytical Processes)

In this unit you will study qualitative and quantitative analysis using both traditional and modern instrumental methods. Volumetric, gravimetric, chromatographic and spectroscopic techniques will be developed. Visits to laboratories beyond the college will provide opportunities for students to observe and/or experience modern analytical techniques and their applications.

## Environmental Chemistry

(incorporating Principles of Environmental Chemistry and Investigation of Environmental Incidents)

This includes an examination of the natural components and cycles within the biosphere, with particular attention in the first instance to the atmosphere. It then addresses the causes, nature, detection and control of gaseous pollutants. This is followed by a study of the role of water in the environment and the safe and efficient management of our water supplies – including salinity control, water treatment and sewage treatment.

Students will participate in a number of practical exercises focusing on the use of chemical techniques to control, monitor or manage the chemistry of real ecosystems. The second half of the unit involves a major research of an environmental issue.

## Industrial Chemistry

(incorporating Foundations of Industrial Chemistry and Investigation of Industrial Processes)

This unit examines chemistry in the real commercial world where it meets up against the realities of environmental and Occupational Health and Safety Law, engineering, economics, geography and commercial demand.

Students will see how scientists and engineers apply their knowledge of chemistry to efficiently extract and produce the enormous range of chemical materials on which our society is based. Metals, gases, petrochemicals, surfactants and processed food are relevant to this unit.

## Biochemistry

(comprising Biochemical Structures & Functions and Biochemical Processes & Applications)

This unit comprises two 0.5 units which are usually combined but may be taken separately. Students are advised to complete a Minor course in either Chemistry or Biology prior to enrolling in these units.

The whole unit covers bio molecules — structure of carbohydrates, saccharides, lipids, amino acids and proteins; identifying tests for bio molecules; implications of protein structure — enzymes and reaction rates; cell structures and functions; metabolic pathways — ATP, energy, digestion, respiration and photosynthesis; and an introduction to DNA and RNA.

In the second half of the unit, students will study more complex pathways, protein synthesis, nucleic acids — role and structure, DNA — its discovery, role and structure, DNA sequencing and profiling; applications of gene technology. Issues arising out of the use of recombinant DNA techniques, genetic engineering and other modern biotechnological procedures will be explored.

Although Biochemical Structures & Functions provides a preferred entry to the unit Biochemical Processes & Applications, it is not a prerequisite unit and students prepared to do additional preparation or who have already gained a very sound background in relevant topics in Biology, will be admitted.

## Forensic Chemistry

This unit will help you understand the role of the forensic chemist in helping crime investigators solve crimes. It covers many techniques including microscopy, spectroscopy, chemical, soil and body fluid analysis, glass comparisons and covers chemicals involved in arson and explosives.

## Electrochemistry

This 0.5 unit builds on to a more thorough understanding of redox reactions. It covers industrial electrolytic processes in the production of metals, halogens and sodium hydroxide.

## Extended Research

This unit is a student-centred research activity that will provide students who have demonstrated superior potential with the opportunity of examining a chemical problem of their choosing.

## More About Chemistry

Chemistry is the study of matter and its reactions. As such it provides an insight into what things around us are made of and how they are made. The nature of the subject ensures that practical work is an integral part of the course.

It is an enabling course which is fascinating in its own right as well as underpinning medicine, metallurgy, environmental studies, food processing, agriculture, forensics, oceanography, genetic engineering, veterinary science, conservation of art materials, wine making and many others.

The course is sequential in Year 11 and you must complete both units to obtain a minor. After completing Physical Chemistry there are a number of options you can follow in Year 12, depending on your interests and the number of enrolments.

The unit Extended Research is available for students who have a keen interest in chemistry.

A major in Chemistry may entitle you to advanced standing at CIT. You cannot count both this course and General Science in your package.

## Examples of people who use Chemistry in their work include

Forensic Scientists  
Vets  
Doctors/Nurses  
Engineers  
Physiotherapists  
Dentists  
Chiropractors  
Geologists  
Biochemists  
Pharmacists  
Oceanographers  
Science Teachers  
Biologists  
Ecologists

# Physics T

## Physics T

This course is designed to develop an understanding of the fundamental concepts of physics together with the skills of problem solving, report writing and communication. Students will need to have good mathematical skills. Physics is essential for careers in physics and engineering and recommended for others such as architecture, medicine and design.

### Course Patterns

This course is sequential in Year 11.

Minor - Force & Geometric Optics and Charge & Energy

Major - The above units, Complex

Motion and Waves and at least one other 0.5 or 1.0 unit.

### Prerequisites

Level 1 Year 10 Science and Maths, or, A/B grades in Level 2 Year 10 Science and Maths. Year 12 units have pre-requisite requirements. You should check with your teacher before selecting any Year 12 unit.

### Note

This course is a rigorous introduction to Physics and would be best understood if Mathematical Methods is also studied.

### Units

Year 11

#### Force and Geometric Optics

(Comprising two 0.5 units)

In this unit you will cover basic Physics skills and be introduced to waves, light and geometric optics as well as motion and forces.

#### Charge and Energy

In this unit you will cover electrostatics and fields and electric circuits. The second half of the unit concentrates on heat.

Year 12

#### Complex Motion and Waves

In this unit you will study complex motion to include vector analysis, projectile and circular motion and conservation of momentum. The unit culminates with an in-depth study of waves and their properties to include superposition interference and a coverage of the contributions of Huygen, Doppler and Young.

## Atomic and Nuclear Physics

In this unit you will study the development of the atomic theory of matter and key advances in our understanding of atomic structure leading to an understanding of the major sub-atomic particles, electron energy levels and energy quanta. You will also study the physical properties of light and be given an introduction to nuclear physics.

### Electronics

(incorporating Analogue and Digital Electronics)

In this unit you will study diodes, transducers, capacitors, transistors, semiconductors, amplifiers, power supplies, digital electronics, logic circuits and computers. It also covers electronic logic, Boolean algebra, buffers, flip flops, digital devices and conversion of analogue to digital and vice versa.

### Nuclear and Medical Physics

In this unit you will cover radioactivity, nuclear reactions and their applications, sub atomic particles and current issues. The second half of the unit covers the application of physics in medicine and includes X rays, electromagnetic imaging, CAT scans, ultrasound and endoscopy use.

### Engineering and Fluid Physics

In this unit you will cover statics, simple machines and properties of engineering materials to include hardness, strength, density, deformation, stress and strain. Hooke's Law and Young's Modulus will also be studied.

You will study the many properties associated with an understanding of fluid behaviour. These properties include density, pressure, surface tension, laminar and turbulent flow, viscosity. The principle developed by Archimedes, Bernoulli and Pascal will also be covered along with the applications of fluid mechanics.

### Electromagnetism

In this unit you will study magnetic fields, magnetic flux and density, current and charge in magnetic fields, the DC electric motor, electromagnetic induction, the transformer and power generation.

### Astrophysics

(incorporating Gravity & Planetary Astronomy and Stellar Astronomy)

In this unit you will study the cycles of the sky to include day, night, seasons, moon phases, eclipses and tides. You will study the contributions of Ptolemy, Copernicus, Brae, Kepler, Galileo, Newton and Cavendish.

# Physics T

Modern theories of the origin of the Solar System and universe will be explored. Stellar Astronomy will include distance and measurement, star types, galaxies, nebulae, quasars and pulsars. The study of cosmology will also be introduced and will cover such topics as gravitational lensing and space-time.

## Project Physics

This unit is a student-centred research activity that will provide students who have demonstrated superior potential with the opportunity of examining a physical problem of their choosing.

## More about Physics

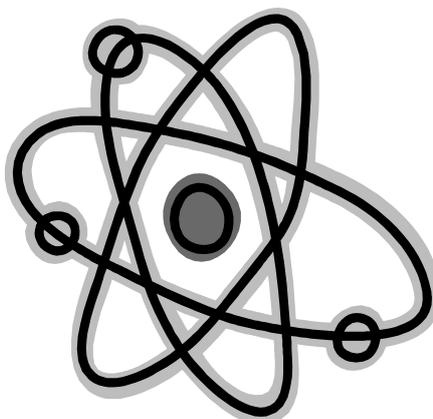
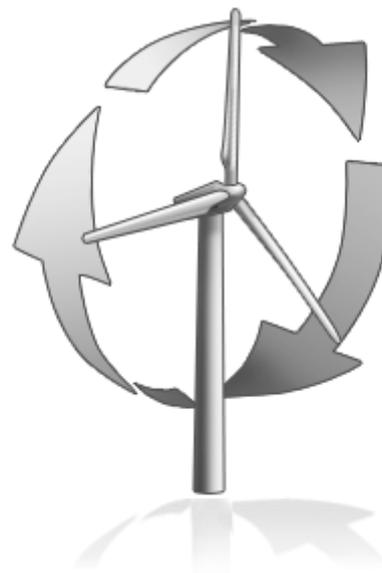
Physics is the area of knowledge that is concerned with the structure of the universe and the best explanations of natural phenomena.

An understanding of physics underpins all branches of science. Its processes, attitudes and values are powerful ways of generating new ideas. Studying this subject will develop your ability to carry out scientific enquiry with creativity, responsibility, confidence and competence

To cater for students with different interests and needs, after a sequential introduction in Year 11, students may choose to follow different pathways. To succeed in this course you will need good mathematical skills and should also be studying the Mathematics Methods course, or achieving very good results in Mathematics Applications.

This course is essential for a wide variety of careers in science. Satisfactory completion of the course may also entitle you to advanced standing at CIT.

Students and teachers are continuing to explore the many unique opportunities afforded by virtue of our unique and exciting wind tunnel facilities.



# General Science T

## General Science T

This is an integrated science course containing elements of all the science disciplines. While it provides a good background for those with an interest in science, it is not recommended for those wishing to pursue demanding science based subjects at university. However it is sufficient for students wishing to study applied science courses at CIT.

### Course Patterns

This course is non-sequential and units will be offered over the two years to allow students to complete a Major course of study.

### Note

Students cannot study both General Science and Physics or Chemistry.

### Units

All 1.0 units are made up of 0.5 units that are related to the whole unit. In this way, students may choose to enrol or exit at term breaks.

### The Human Machine in Health and Sickness

In this unit you will study food and digestion and how lifestyle choices may affect overall health. Both the cardiovascular system and respiratory systems and the importance of muscles and bones are covered. Infectious and inherited disease along with the immune system are also covered.

### Life and Crime

In this unit you will cover living things, their properties and essential requirements. Comparisons of plants and animals will be made. Entomology and the importance of soil in the food web are addressed. The unit then leads into the work of the forensic scientist and covers many processes to include crime scene analysis.

### The World in Motion

This unit begins with a study of wave properties and behaviours, then covers optical instruments. A study of the eye and the ear are also included. Newton's laws of motion are then covered and includes the concepts force, inertia, momentum and energy. A coverage of the safety features of cars concludes the unit.

### Living In the 21st Century

In this unit you will study a wide range of chemicals used in everyday living to include their properties and uses. Forms of energy that we are dependent on as well as viable alternatives are also covered.

## Beyond Earth

This unit is primarily an astronomy unit where you will study the night sky and beyond into outer space. The history and philosophy of astronomy are discussed and a detailed account of telescopes and measurement of distance in space is covered. Theories of the origins of the universe and our solar system will be covered and a detailed coverage of our sun will be included.

## Our Rocky Planet

This unit is primarily an introductory geology unit that covers crystals, minerals, both common and basic rock forming and covers the rock cycle where the three rock types will be studied. Attention will also be given to gemstones and economically important minerals to include mining methods. Volcanoes, tectonics and sea-floor geology will conclude the unit.

## Our Perilous Planet

In this unit you will study disasters, both natural and human-made. An emphasis will be given to famous events to include Australian examples. Warning systems and preventative measures will be discussed as well as an outline of our emergency services. The chemistry of water will then be covered along with its uses and abuse to include pollution. Problems associated with irrigation, soil salinity and sustainable farming culminating with an overview of the earth's oceans are covered.

## Chemistry Around Us

In this unit you will study the basic concepts of chemistry. It will cover atoms and elements, compounds, metals, and acids and bases. Chemical formulae and equations will be addressed and the mole with basic stoichiometry will be introduced.

## More About General Science

General Science is the study of chemical, physical and natural phenomena in the world around us. The course is designed for those students wishing to undertake science at senior level without the demanding mathematical treatment covered in other courses.

All of the major areas of science are studied in this course. There is an emphasis on understanding concepts and applying knowledge to your daily situations. Your skills are developed through practical work and research activities. There are a range of units that cover the essential elements of chemistry, physics, biology, and earth sciences.

The units cover the chemistry and physics and biology necessary to ensure you better meet desired prerequisite knowledge expectations at the CIT and the assumed knowledge requirements at UC in a number of courses.

# Science A

## Science A

This is a course that prepares you for the workforce and deals with current issues in Science. Specific units link well with CIT Certificate courses giving a good background for a range of particular occupations and apprenticeships. Other units in Science A follow the broad areas of science - energy and change, life and living, natural and processed materials, and earth and beyond.

The units are written to allow you to focus on your areas of interest and to extend your understanding of how science relates to everyday life. They also address many of the social and ethical issues that confront us today. All units have a large component of practical work.

### Course Patterns

This course is non-sequential. Students will be encouraged to participate in a broad range of units over the two years of study.

### Units

All units in Science A are 1.0 units. 0.5 units may be available in special circumstances

**Hair Care** (made up of Hair Structure and Preparations and Hair Styling)

This unit introduces you to the study of the structure of hair, its nutritional needs, growth and the changes that occur with age. You will prepare and test hair care products and have the opportunity to visit relevant workplaces and CIT. There is a large component of practical work in this unit.

**Cosmetics** (made up of Skin Care and Beauty Products)

This unit will introduce you to a wide range of beauty products and cosmetics. You will learn about their preparation, their application and how they work. You will have the opportunity to visit relevant work environments and CIT facilities.

**Other units cover all branches of science and there are sure to be some that will be of interest to most.**

### Blood & Guts & Human Sexuality

Structure and function of the circulatory and digestive systems. Cardiovascular disease. Structure and function of the male and female reproductive systems, pregnancy, contraception and sexually transmitted infections.

### Genes, DNA, Germs and Other Bugs

Genes, chromosomes and the function of DNA. Genetic disorders and cloning. The range of micro organisms and their significance. Common human infections and viruses.

### Simple Machines and Kitchen Chemistry

An understanding that most mechanical devices are made up from simple machines. A study of the concept of energy and the energy changes that occur in the use of simple machines. A study of the different sources of chemicals used in and around the home. Chemistry involved in cooking and hazard recognition of some household chemicals.

### Future Technology and Forensic Science

An appreciation of the role of technology in environmental, social, political and economic contexts and ethical issues associated with future technologies. Understanding the work of forensic scientists covering casts, moulding, finger printing, blood analysis, chemical analysis, forgery detection and famous case studies.

### Gardening Science and Cycle of Life

Structure and function of plants, seeds and fruit. Plant reproduction, (vegetative and seed), pesticides and garden planning. Concept of food web/chains and the feeding relationships between organisms. Relationship between organisms and the environment and the impact of humans on the biosphere.

### Aliens and Science Fiction and Stars

Comment knowledgeably on the science in science fiction and develop a sceptical way of thinking. Draw conclusions based on facts. Basic astronomy covering the universe and our galaxy. Space travel and the feasibility of journeying to the planets in our solar system. Space phenomena to include eclipses, comets, asteroids, meteors and black holes.

You may select 0.5 units of study from the following list.

### First Aid and the Body (Level 2 Certificate)

DRABCD Action Plan, management of the unconscious, casualty assessment and resuscitation techniques.

### Case Study

Work independently on a theme negotiated with your teacher.

Examples of people who use Science A in their daily lives include: Hairdressers, Florists, Beauticians, Pet Carers, Kennel Assistants, Vet Nurses, Lab Technicians, Dental Assistants.



# Special Programs

# Adventure Plus Program

## ADVENTURE PLUS PROGRAM

A program of 'Big Trip' options incorporating the renowned Tertiary/Vocational Outdoor Education course and Certificate II in Outdoor Recreation – for students who are deeply interested in adventure activities and the natural environment. This is an enrichment and extension program.

### Snowboarding and Skiing Japan

Niseko Summer school program - 10 days in late January

### Barrier Reef Scuba and Snorkelling

A week of marine studies, snorkelling, scuba diving on Lady Musgrave Island – pristine coral reef – turtles, whales and more (approximate cost \$800)

### Rock Climbing in the Arapiles

Five days climbing the best in Australia (approx \$150)

### Caving the Nullabor Plains

World renowned cave systems (approximate cost \$750)  
This trip runs every 2 years

### Mungo

A very special journey deep into the past. Hiking and mountain biking arid NSW.

### Plus the regular trips

Diving and snorkelling - Jervis Bay

Climbing—Blue Mountains and Nowra

Backcountry skiing—Namadgi

Snowboarding and skiing—Perisher/Thredbo

Hiking - Snowy Mountains and the Budawangs

Caving - Bungonia and Wee Jasper

Whitewater canoeing and kayaking

Rope techniques—Big Hole

Mountain biking—Thredbo Cannonball Run

### Selection

Interested students should complete a selection form. Selection for the program is based upon the application and performance, teamwork and attitude in term 1 and an interview with student and parents.

Students enrolled in the Adventure Plus program are guaranteed a position on all trip options selected.

Flexible scheduling minimises impact on other studies.

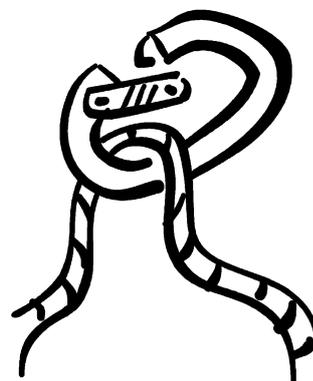
All major trip options are integrated into the Outdoor Education Course with assessment counting towards the student's ATAR.

### Why?

- Professional qualification in a rapidly expanding profession
- Makes college study exciting – excellent for overall motivation
- High powered professional skills training – leadership, teamwork, time management, decision making, risk management, vocational skills
- ATAR for university entry
- Fantastic adventure activities
- Highly skilled and experienced staff
- Well resourced Outdoor Education Skills Centre – the latest and best equipment

For more information contact:

Peter Blunt  
UCSSC Lake Ginninderra  
62057099  
peter.blunt@ed.act.edu.au



# Elite Sports Program

## Elite Sports Program

The College offers gifted sportsmen and women the opportunity to develop their sporting skills while maintaining their academic studies in a supportive College environment.

The Elite Sports Program includes accredited courses, which will form part of an academic package leading to the award of an ACT Year 12 Certificate.

## Elite Sport Academy

Students in the program receive an Elite Sport Uniform as well as an option to receive a Clublime Platinum Gym Membership through our partners from CISAC. The students also have information sessions presented by guest speakers from the AIS as well as excursions to Elite Sport facilities across the region.

## Courses

**External Sports Studies A  
Sports Development A  
Sports Specific Basketball, Futsal, Rugby Union/  
League, Volleyball R**

### External Sports Studies A

This course is offered to students who participate in a recognised elite sports program (Australian Institute of Sport or ACT Academy of Sport).

External Sports Studies aims to assist students to develop in both their academic and sporting endeavours. Students who apply for this course will be actively training and competing at a state, national and/or international level.

The rationale of the course is that participation in an elite sporting program such as the Australian Institute of Sport or ACT Academy of Sport provides learning outcomes and opportunities equivalent to other college physical education courses.

This course may form an accredited major (two years of study) or a minor (one year of study).

### Sports Development A

This course is offered to students who are potential elite athletes or officials participating in ACT level 'satellite' programs. Sports Development aims to assist students to develop in both their academic and sporting endeavours. Students who apply for this course will be actively training and competing at a state or national level. The sport development course is also open to students who undertake dance training at an elite level.

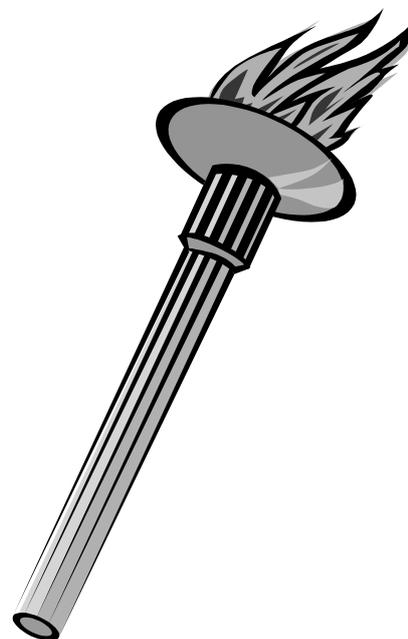
## Students' Role

Students enrolled in External Sports Studies and Sports Development must meet on a regular basis with their class teacher to provide evidence of participation and to enable progress to be monitored. Each student will maintain a logbook/diary for this purpose.

The diary will be signed off weekly by an Athlete Career and Education tutor or coach. At the end of each unit the logbook will be submitted along with a practical skills evaluation and attendance form for the award of grades.

## How do I obtain more information?

Entry is by application at the time of enrolment. For further enquiries contact the college on 6205 7099



# Excellence and Leadership Program

## The Excellence and Leadership Program

This is open to all gifted, talented and/or leadership orientated students who are planning on attending UCSSC LG for years 11 and 12.

A **talented student** is defined as having exceptional skills in one particular area e.g. Drama, Music, Mathematics, French etc.

A **gifted student** is one who has exceptional skills across many areas.

**Leadership** takes in those students who are committed to school and community service with a willingness to be role model, participate in a range of college activities and outreach opportunities.

This program has been established to give recognition to these students providing **enhanced opportunities**, encouraging them to **excel** and assisting them to develop them as **adaptable** and **independent** learners.

### What does the Program offer?

An innovative program specifically designed for these students including seminars and organised events throughout the college years.

A support program to assist with the transition from high school to college that will commence with a leadership program at the beginning of Year 11.

Visits to tertiary institutions and other relevant organisations to enhance the knowledge and understanding the students have in preparation for post college pathways.

...and so much more!

All successful applicants will attend the award and celebration ceremony held in the year prior to entering the program including the John Cope Lecture.

### Referees

Applicants are asked to provide referees. At least one needs to be a teacher of the applicant, a year coordinator or the school principal.

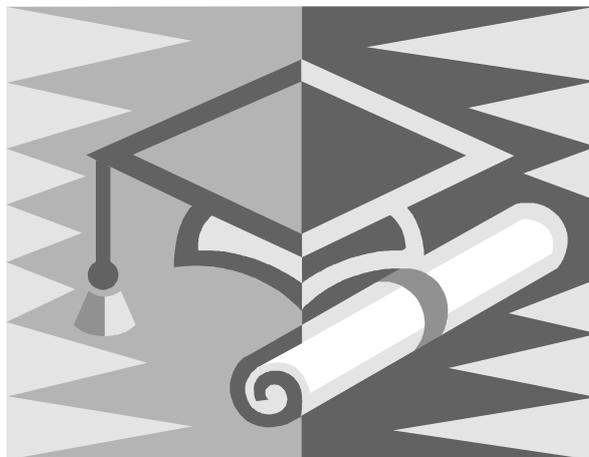
## Referee Supporting Statements

Referees provide evidence to support the application for a placement in the program. Referees are asked to comment on the following:

- Academic achievement and potential
- Work ethic
- Personal qualities
- Recommendation regarding the suitability of the student for a place in the program.

### How do I obtain more information?

For further enquiries contact the college on 6205 7099 OR via the contact email on the college webpage [www.lakeonline.act.edu.au](http://www.lakeonline.act.edu.au)



# Global Classroom

Are you interested in international issues, global citizenship, meeting people, leadership opportunities and making a difference?

Then Global Classroom could be for you!



## Global Classroom (R unit)

Global Classroom is a registered unit (students are given credit points towards their Year 12 Certificate) offered exclusively at UCSSC Lake Ginninderra.

## Global Classroom

Global Classroom is an ongoing project exclusively run in Australia at UCSSC Lake Ginninderra in conjunction with the Scottish Department of Education.

Global Classroom is an independent educational organisation that networks schools around the world - it involves shared learning among its schools, the ethos being that students can "learn locally" but "think globally". The program aims to create an innovative network of schools that are committed to achieving systematic and sustained change.

## Post-School Gap Year Opportunities

Global Classroom participants may extend their international involvement with the Global Classroom group by joining up to Learning School.

You can further your international contribution by joining a team of other gap year students, travelling to and doing extended research in all the international partner schools (listed below) over several months.

## How it works

Choose this as an additional unit when you are selecting your subjects.

**In Class:** Students work on various educationally themed and conference-related projects as set out by Global Classroom conference organisers. See website: [www.global-classroom.org](http://www.global-classroom.org).

A website is usually created by the conference organisers for the year. The Education and Training Directorate CLC intranet also contains all student files and videos created by the Global Classroom group at UCSSC Lake Ginninderra.

## International Conferences

Each year there is an international Global Classroom Conference. In 2013 the conference is in Germany in June.

## International Schools involved in Global Classroom

Anderson High School, Shetland Islands; Bobergsgymnasiet, Ange, Sweden; Gymnazium Zlin, Czech Republic; Graf-Friedrich-Schule, Diepholz, Germany; Ridgewood High School, Ridgewood, New Jersey, USA; Shirley Boys High School, Christchurch, New Zealand and South Peninsula High, Cape Town, South Africa.



## AFL Academy

UCSSC Lake Ginninderra offers talented AFL players the opportunity to enhance their football skills while maintaining their academic studies in a supportive College environment.

The AFL Academy Program includes an accredited course which will form part of an academic package leading to the award of an ACT Year 12 Certificate.

Students involved in the AFL Academy Program will undertake practical activities and theory subjects related to enhancing their football development and providing knowledge for improving their sporting endeavours.

### Sports Development Course

The course of study undertaken by members of the AFL Academy Program is:

Sports Development A

This course may form a major (two years of study) or a minor (one year of study).

### University of Canberra connections

Students participating in the UCSSC AFL Academy will be part of a college that operates in partnership with a significant Australian University.

Students will have access to the latest sporting innovation techniques and to the teaching and learning opportunities that a school/university partnership offers. An academic, sporting and career advantage that puts you a step ahead.

### Course Rationale

The college AFL program would involve an opportunity for talented AFL players in North Canberra to develop their football skills in school time, to work on areas related to their development as football players and to undertake mainstream studies at the college.

The students in the program form a class / training group who meet every week to undertake all aspects of their football development. Development officers and coaches from the Belconnen Magpies as well as Ainslie Football club will meet and train the group each week to compliment their current AFL training regime.

Students will be expected to maintain a diary which incorporates a record of their details, their individual goals, injury / treatment records, planning of all their commitments and a record of all training / match involvements. Feedback will be sought from club coaches to assist with player development and assessment.

## Theory Component

During the course a wide range of skills and topics will be covered to ensure all students are undertaking a complete program of football development.

### Topics to be covered include:

- Strength and Conditioning  
- practical and theory
- Skill development principles
- Injury prevention and treatment
- Sports Administration
- Sports Coaching
- Media studies
- Life Skills
- Leadership Skills
- Goal Setting
- Time Management
- Psychology of Sport

The course would also involve coaching sessions at local primary schools and high schools and by undertaking topics at various gyms/facilities within the area.

## AFL Practical Component

The practical aspect of the course is designed to provide students with quality and sequenced coaching and active participation in high standard competition. Students will be able to train on-line during the school day, developing both individual and team skills.

Coaching assistance will be provided by the Belconnen Magpies Football Club, Ainslie Football Club and the College is developing links with the Greater Western Sydney club.

The areas to be covered in this course include individual skills, personal fitness, team skills, coaching and umpiring.

Students will be expected to play for the College in local and interstate competitions. The college regularly competes in the Giants Cup and is developing links with interstate schools / colleges to arrange exchange matches during the year.

## Academy Entry

Students wishing to be accepted into the UCSSC Lake Ginninderra AFL Academy need to complete and return an application form to the college.

Further information on the AFL Academy can be provided by contacting the Physical Education Faculty staff at the college on 62057099.



