# Stage 5 Curriculum Information for 2024 



Cherrybrook Technology High School

Years 9 \& 10, 2024

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STAFF DIRECTORY


## INTRODUCTION



This booklet has been prepared to help students and parents find their way through the complex curriculum structure on offer to students in Stage 5 at Cherrybrook Technology High School. It should be closely read and used as a reference for students and parents about the patterns of study available to students as well as essential information about each subject and course and the manner in which these are assessed and graded.

The Stage 5 curriculum culminates in the award of grades, which are forwarded to the NSW Education Standards Authority (NESA) for the Record of School Achievement (RoSA). While it is expected that the vast bulk of students at Cherrybrook will continue their studies in Years 11 and 12 for the award of the Higher School Certificate, student work in Stage 5 is nevertheless crucial for future success. Students will gain skills and knowledge over the next two years, which will be essential for their further learning and also develop appropriate study skills and self-discipline.

Cherrybrook's innovative curriculum structure in Stage 5 allows for a very broad range of electives and it is important that students discuss these many options with their parents or care providers and choose subjects and courses that are commensurate with their skills, abilities and interests. Students should seek advice from appropriate staff if they are unsure of any details prior to making their final decision.

The commencement of Stage 5 is an exciting time for students. They are offered new challenges and for the first time in their school careers have real choices in terms of the curriculum they study. I would like to take this opportunity to wish each student well for their studies in Stage 5 and implore each student to commit themselves to their studies and enjoy the curriculum pattern they choose.

Matt Townsend
Principal

## THE SEMESTER SYSTEM AT CTHS

The Stage 5 semester system is a unique opportunity provided by CTHS that engages all students in their learning in an interesting and challenging way. Through our semester course system, the interests of students are catered for by offering a depth and breadth of academic opportunities that few schools are capable of providing.

The elective curriculum is organised into units of work which are one semester (two terms) in length. Elective subjects are referred to as "courses". Each course is broken up into classes which are referred to as "units". Each unit is worth 50 hours towards the Record of School Achievement. Semester units are vertically integrated across Stage 5. This means that classes may be a combination of Year 9 and 10 students. All students in a vertical class study the same course.

Courses which are not run along semester lines include:

- English
- Mathematics
- Science
- PDHPE

It is important to note that some semester units are designed to be completed sequentially - each unit becomes a prerequisite for the next. For example, to study 'Electronics 2', it is necessary to have successfully completed 'Electronics 1'. All prerequisites are clearly stated in the unit descriptions to follow.

Students must be aware that in order to satisfy the elective study requirements, students may be required to complete particular units designated as 'core'. For example, in order to qualify for 100 or 200 hours in the Commerce course students must complete the units 9HCA (Smart Spending and Earning) and 9HCB (Markets and the Legal System). In addition, some semester units have fees attached to cover unit materials and consumables. These unit fees are clearly described in the unit descriptions and are compulsory. There are many units offered which do not attract fees. Payments will be invoiced and should be made within two weeks.

## Stage 5 Eligibility

Students entering Year 9 are eligible for the NSW Education Standards Authority (NESA) credential, the Record of School Achievement (RoSA) when they have completed Stage 5 at the end of Year 10. The RoSA will be issued to students only if they complete Year 10 and leave school before they complete the HSC.
Students must have:

- Attended a government school, or have attended a registered non-government school to which a current certificate of accreditation for presentation of candidates for the Record of School Achievement applies, or have attended a school outside New South Wales recognised by NESA
- Participated and satisfactorily completed courses of study which have been determined as appropriate by the NESA for the Record of School Achievement
- To the NESA's satisfaction, undertaken the requisite examinations or other forms of assessment
- Completed Year 10
- Students completing Year 12 will be advised of their RoSA grade or a record of achievement which acknowledges their HSC.


## Issuance of RoSA

Students, who the Principal has indicated are leaving school and have met all the requirements, will receive a Record of School Achievement credential from the NSW Education Standards Authority (NESA). Students, who are leaving school, but who have not met the requirements for the Record of School Achievement, will receive a Transcript of Study from NESA.

## End of the school year for school leavers

A requirement for the award of the Record of School Achievement is that students attend until the final day of Year 10 as determined by the Principal.

## Unit Performance Descriptors

Performance descriptors have been developed for each Stage 5 NESA Developed unit. The descriptor that provides the best overall description of the student's achievement, at the end of Stage 5 , will determine the grade awarded.
For NESA Endorsed School Developed Courses and Content Endorsed Courses, the Common Grade Scale will be used.
The descriptors describe the main features of a typical student's performance at each grade measured against the syllabus objectives and outcomes for the course.

## NESA Developed Courses

Courses developed by NESA.

## NESA Endorsed Courses

School developed NESA endorsed courses, designed by the school to meet the local needs of students.

## Content Endorsed Courses

Courses developed by NESA for a wide candidature.

## Non-Completion of the Requirements of a Stage 5 (Year 9 and 10) Course

Any course not satisfactorily completed appears on the student's transcript of results as 'Not Completed'. Where non-completion is in a mandatory course, the student will not be eligible for the award of the Record of School Achievement and may not be eligible to enter Preliminary (Year 11) courses.

The NSW Education Standards Authority (NESA) requires schools to issue students with a minimum of two course specific official warnings in order to give them the opportunity to redeem themselves.

## HSC Minimum Standards in Literacy and Numeracy

In 2018 the NSW Education Standards Authority (NESA) introduced the HSC minimum standard to help ensure students have the key literacy and numeracy skills for life after school. Students in New South Wales will need to demonstrate a minimum standard of literacy and numeracy to receive the HSC credential from 2023. Information and resources on the minimum standard are available on the NESA website, NESA Schools Online and the department's HSC minimum standard webpage.

## Selection of Stage 5 Courses

In order to satisfy the minimum requirements for the RoSA, students at Cherrybrook Technology High School will complete the following course of study throughout Year 9 and 10:

- English
- Mathematics
- Science
- Personal Development, Health and Physical Education (PDHPE)
- Australian History
- Geography

And a minimum of four 100 hour elective courses:

- Two 200 hour elective courses (consisting of 4 different units with the same prefix over two years)
- Four 100 hour elective courses (consisting of 2 units with the same prefix over one or two years)
- Any combination of 100 and 200 hour elective courses.

Please note due to the physical requirements of PDHPE Mandatory and Elective units and in an attempt to reduce injuries, students will be limited to completing no more than 50 hours (1 PDHPE elective class) per semester and no more than 100 hours (2 PDHPE elective classes) in any one year. Exception to this rule will be determined by the Head Teacher PDHPE on application and a case by case basis.

| Pattern 1 - Two 200 hour courses |
| :--- |
| Sample Student Program 1: |
| (first) 200 hour course in Food Technology: |
| 1. TFA - Healthy Living for Life |
| 2. TFB - Food for All |
| 3. TFC - The Business of Food |
| 4. TFD - Australian Cuisine |
| (second) 200 hour course in Automotive: |
| 1. TV1 - Automotive 1 |
| 2. TV2 - Automotive 2 |
| 3. TV3 - Automotive 3 |
| 4. TV4 - Automotive 4 |
|  |
|  |
|  |
| OR |

## Pattern 2-One 200 hour \& Two 100 hour courses

Sample Student Program 2:
200 hour course in Visual Arts:

1. CVC - Masters of Painting
2. CVD - Contemporary Expressive Painting
3. CVE - Ceramics - Hand-building and Decorative Techniques
4. CVF - Ceramics - Form and Function
(first) 100 hour course in Commerce:
5. 9HCA - Smart Spending \& Earning (core)
6. 9HCE - Law in Action
(second) 100 hour course in Elective History:
7. HHA - Archaeology: Digging up the Past
8. HHC - Technology of Warfare

OR

| Pattern 3 - Four 100 hour courses | units available over the two years. <br> One of these units will be allocated to Vocational Education in Year 10 <br> Another of these units must be allocated to the Science B unit in Year 10, in order to meet the minimum hours required for Science <br> The remaining six units may be used for 'one-off' interest units <br> 100 hour elective courses can be increased to 200 hour elective courses by completing an additional two units. <br> These are the minimum requirements and patterns of study can be changed and adjusted each semester depending on availability. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sample Student Program 3: |  |  |  |  |  |  |  |  |
| (first) 100 hour course in IST: <br> 1. TCH - Core - People, Networks \& Website Development <br> 2. TCR - Robotics and Artificial Intelligence |  |  |  |  |  |  |  |  |
| (second) 100 hour course in Drama: <br> 1. CDA - All the World's a Stage <br> 2. CDB - Out of Your Mind |  |  |  |  |  |  |  |  |
| (third) 100 hour course in Physical Activity and Sport Studies: <br> 1. PSP - Sports Performance <br> 2. PSM - Sports Medicine |  |  |  |  |  |  |  |  |
| (fourth) 100 hour course in Japanese: <br> 1. LN3 - Japanese Level 3 <br> 2. LN4 - Japanese Level 4 |  |  |  |  |  |  |  |  |


#### Abstract

Assessment of Stage 5 Courses All units studied by students consist of internal assessment requirements. Assessment procedures for each KLA will vary according to the needs of the specific unit. If you have any questions in relation to the assessment of a particular unit please contact the Head Teacher of that subject area.

Student achievement will result in a grade being awarded which indicates the general performance of the student in this unit. These results are to be shown on the separate NSW Education Standards Authority (NESA) Document - Record of School Achievement at the completion of Year 10. The course performance descriptors that assist schools in allocating grades vary between subject areas but are explained by the NESA at http://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/leaving-school/record-of-school- achievement\#reporting


## Changing Your Selections

Students may apply to change units chosen while in Years 9 and 10. Considerable effort is made to satisfy the requests from students, however, it should be noted that classes will be allocated on the basis of these primary selections and class changes will only be possible when there is room in the new classes being selected. Students must also review and be responsible for the impact the change may have on their 200 hr and 100 hr course electives. Requests for change will not be granted if they render the student ineligible to complete the Stage 5 requirements.

Students will be provided with printouts of their unit selections on several occasions throughout Stage 5. These will be used to check that the subjects being undertaken by each student satisfies both Department of Education and Communities and NSW Education Standards Authority requirements.

Students will be informed at the end of each semester when changes to their selections can be made.

While every effort is made to satisfy student requests for courses, this is not always possible. Units are assigned at the discretion of the Principal and Stage 5 Head Teacher in accordance with the NSW Education Standards Authority (NESA), school and stage requirements.

## STAGE 5 ASSESSMENT TASK ILLNESS OR MISADVENTURE POLICY

- Each student is expected to complete all assessment tasks.
- All work completed must be the student's own work. Work submitted containing work not done by the student may receive zero marks.
- Assessment task dates will usually be communicated by the class teacher at least two weeks before completion date.
- If a student is absent from an assessment task or fails to submit a task on or before the due date, a mark of ZERO will be recorded until the result of any appeals is determined.
- If a student knows beforehand that they will be absent, they MUST inform the Head Teacher of the course beforehand to complete an Illness/Misadventure Form before the date of the task.
- If a student is absent from an assessment task, the student has the responsibility of reporting to the Head Teacher of their course on their arrival at school to arrange to complete the task. Failure to do will be considered late work. An Illness/Misadventure form must then be completed. A substitute task may be given.
- If a student wishes to appeal for a task not attempted or a task completed under adverse conditions (e.g. illness) an Illness/Misadventure Appeal form MUST be completed and returned to the appropriate Head Teacher on the first day returning to school. It is the student's responsibility to ensure that the appeal form is completed correctly. All parts must be completed before submitting to the Head Teacher.
- Plagiarism is considered malpractice. Plagiarism is the use of the work of others without acknowledgement and includes:
- The submission of part or all of someone else's work
- The copying of paragraphs or sentences from external sources without referencing.
- If a student receives a zero mark, parents will be notified and made aware of the potential consequences.


## Frequently Asked Questions

What should you do if?

| Issue | Process |
| :--- | :--- |
| $\begin{array}{l}\text { Sick and can't attend school to complete an } \\ \text { EXAM }\end{array}$ | $\begin{array}{l}- \text { Before school on your first day back, report to KLA } \\ \text { Head Teacher with completed Illness and } \\ \text { Misadventure Form (from Canvas) }\end{array}$ |
| $\begin{array}{l}\text { Won't be at school on the day of an EXAM } \\ \text { (including other school commitments, approved } \\ \text { leave, etc) }\end{array}$ | $\begin{array}{l}- \text { SLA Head Teacher will discuss options for you to } \\ \text { complete task at a later date. }\end{array}$ |
| to KLA Head Teacher as soon as possible prior to the |  |
| exam. |  |
| - KLA Head Teacher will discuss options for you to |  |
| complete task at an alternative date. |  |$\}$

## STAGE 5 ASSESSMENT TASK 2024 ILLNESS OR MISDAVENTURE FORM

A student who believes that circumstances occurring immediately prior to or on the day of an assessment task and which were beyond their control, leading to missing a task, should complete this form and give it to the appropriate KLA Head Teacher, no later than the next school day on return to school.

In dealing with illness or misadventure there can be no consideration for:

- Difficulties in preparation or general loss of preparation time
- Loss of study time or facilities prior to the formal assessment
- Misreading of the timetable or instructions
- Long term illness, such as glandular fever, asthma and epilepsy - unless there is evidence of a sudden recurrence during the examination period
- Conditions for which you have been granted disability provisions, unless you experience further difficulties
- Attendance at a sporting or cultural event
- Matters that could have been avoided by the student.

Please see the Head Teacher Stage 5 for further information. Note: Failure to fully complete this form or provide necessary detail and supporting documentation will result in an application being declined.

Student's name: $\qquad$ Year:9 10

Course: $\qquad$ Class Teacher: $\qquad$
Name of assessment task affected: $\qquad$
Original date of assessment task: $\qquad$
Attach a copy of the assessment notification for an in-class assessment task.
Students must describe how the illness or misadventure suffered has affected their ability to complete the assessment task. Attach independent evidence (if available) of the illness or misadventure.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Student's signature: $\qquad$ Date:

Parent's signature: $\qquad$ Date: $\qquad$
Please submit this application to the KLA Head Teacher no later than one day after the assessment task.
For Office Use Only

Date submitted: $\qquad$ Received by: $\qquad$
KLA Head Teacher Decision:

STAGE 5 COURSE OVERVIEW


| KLA | Curriculum <br> Course | Course Units | Class Code | Prerequisite |
| :---: | :---: | :--- | :---: | :---: |
| English |  | Compulsory Unit | ENG |  |
|  | English Elective | English Speakers | EWR | NESA Approved <br> Course |
|  |  | Priters \& Writing | ESP | NESA Approved <br> Course |
|  |  | EPO | NESA Approved <br> Course |  |


| KLA | Curriculum Course | Course Units | Class Code | Prerequisite |
| :---: | :---: | :---: | :---: | :---: |
|  | HSIE Unit | HSIE Independent Unit of Study |  | This unit must be approved by the HT |
|  | Commerce | Core - Smart Spending \& Earning | HCA |  |
|  |  | Core - Markets \& the Legal System | HCB |  |
|  |  | Running a Business | HCC |  |
|  |  | Independence \& Travel | HCD |  |
|  |  | Law in Action | HCE |  |
|  |  | The Economy \& Investing | HCF |  |
|  | Geography | Year 9 Geography (mandatory) | 9GEO |  |
|  |  | Year 10 Geography (mandatory) | 10GEO |  |
|  | Geography Elective | Disasters | HGA |  |
|  |  | Global Issues | HGB |  |
|  | History | Year 9 History (mandatory) | 9 HIS |  |
|  |  | Year 10 History (mandatory) | 10HIS |  |
|  | History Elective | Making History - Medieval 1 | HHM1 |  |
|  |  | Making History - Medieval 2 | HHM2 | HHM1 |
|  |  | Archaeology: Digging up the Past | HHA |  |
|  |  | Life in the Classical World | HHB |  |
|  |  | Technology of Warfare | HHC |  |
|  |  | History's Mysteries | HHD |  |
|  |  | History on Screen | HHE |  |
|  |  | Forgotten Histories | HHF |  |
|  | Aboriginal Studies | Aboriginal Studies 1 | AB1 |  |
|  |  | Aboriginal Studies 2 | AB2 | AB1 |



| KLA | Curriculum Course | Course Units | Class Code | Prerequisite |
| :---: | :---: | :---: | :---: | :---: |
| Science |  | Compulsory Year 9 Unit | SCl |  |
|  |  | Science Core A (Year 10) | SCA |  |
|  |  | Science Core B (Year 10) | SCB |  |
|  |  |  |  |  |
| KLA | Curriculum Course | Course Units | Class Code | Prerequisite |
| Computing | Computing Technology | Modelling networks and Social Connections | 9CTN | Enterprise information systems |
|  |  | Designing for the User Experience | 9CTX |  |
|  |  | Analysing data | 9CTD |  |
|  |  | Building mechatronic and automated systems | 9CTM | Software Development |
|  |  | Creating games and simulations | 9CTG |  |
|  |  | Developing apps and web software | 9CTA |  |
|  |  |  |  |  |
| KLA | Curriculum Course | Course Units | Class Code | Prerequisite |
|  | Agriculture Technology | Agricultural Systems | TAA |  |
|  |  | Plants in Agriculture | TAB |  |
|  |  | Animals in Agriculture | TAC |  |
|  |  | Agricultural Electives | TAD |  |
|  | Child Studies | Birth, Babies \& Newborn Care | THA | NESA Endorsed Course |
|  |  | Toddlers, Tantrums \& Children | THB |  |
|  |  | No Brakes, Burns or Trauma | THC |  |
|  |  | Programmed Tots | THD |  |
|  | Graphics Technology | Core 1 - Graphics Technology 1 | TG1 |  |
|  |  | Core 2 - Graphics Technology 2 | TG2 | TG1 |
|  |  | Graphics Technology 3 | TG3 | TG2 |
|  |  | Graphics Technology 4 | TG4 | TG3 |
|  | Food Technology | Healthy Living for Life | TFA |  |
|  |  | Food for All | TFB |  |
|  |  | The Business of Food | TFC |  |
|  |  | Australian Cuisine | TFD |  |
|  | Textiles Technology | Casual, Street \& Beachwear | TTA |  |
|  |  | Textiles, Toys \& Costumes | TTB |  |
|  |  | Textile Artist | TTC |  |
|  |  | Active Wear \& French Technique | TTD |  |
|  | Design \& Technology / STEM | Amazing Young Fashion Designers | TDA |  |
|  |  | Renovation Rescue | TDB |  |
|  |  | My Style | TDC |  |
|  |  | Red Carpet Fashions | TDD |  |
|  |  | STEM 1 | TS1 |  |
|  |  | STEM 2 | TS2 | TS1 |


|  |  | STEM 3 | TS3 | TS2 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | STEM 4 | TS4 | TS3 |
|  | Students may recorded for $t$ <br> - Two x 200h <br> - One x 200h <br> - Two x 100h | e up to two (2) courses based on Record of School Achievement (R ourses <br> nd One x 100hrs Courses ourses | dustria | logy Syllabus |
|  |  | Core - Rings \& Stone Settings | TR1 |  |
|  | Indus Tech - | Enamelling \& Etching | TR2 | TR1 |
|  | (Jewellery) | Chain Making | TR3 | TR2 |
|  |  | Casting in Jewellery Design | TR4 | TR2 |
|  |  | Core 1 - Automotive 1 | TV1 |  |
|  |  | Core 2 - Automotive 2 | TV2 | TV1 |
|  | Indus Tech Automotive | Unit 3 - Automotive 3 Specialised | TV3 | TV2 |
|  |  | Unit 4 - Automotive 4 Specialised | TV4 | TV3 |
|  |  | Girls Automotive | TVG | Interest Subject |
|  |  | Core 1 - Building \& Construction | TB1 |  |
|  | Indus Tech - | Core 2 - Building \& Construction | TB2 | TB1 |
|  | Building \& Construction | Unit 3 - Outdoor Structures \& Landscaping | TB3 | TB2 |
|  |  | Unit 4 - Outdoor Structures \& Landscaping | TB4 | TB3 |
|  |  | Core 1 - Engineered Structures | TE1 |  |
|  | Indus Tech - | Core 2 - Engineered Mechanisms | TE2 | TE1 |
|  | Engineering | Unit 3 - Control Systems | TE3 | TE2 |
|  |  | Unit 4 - Alternative Energy | TE4 | TE3 |
|  |  | Core 1 - Electronics 1 | TL1 |  |
|  |  | Core 2 - Electronics 2 | TL2 | TL1 |
|  | Indus Tech Electronics | Unit 3 - Electronics 3 Specialised | TL3 | TL2 |
|  |  | Unit 4 - Electronics 4 Specialised | TL4 | TL3 |
|  |  | Core 1 - Metal | TQ1 |  |
|  | Indus Tech - | Core 2 - Metal | TQ2 | TQ1 |
|  | Metal | Unit 3 - Metal Machining | TQ3 | TQ2 |
|  |  | Unit 4 - Metal Fabrication | TQ4 | TQ3 |
|  |  | Core 1 - Multimedia 1 | TM1 |  |
|  | Indus Tech - | Core 2 - Multimedia 2 | TM2 | TM1 |
|  | Multimedia | Unit 3 - Multimedia 3 | TM3 | TM2 |
|  |  | Unit 4 - Multimedia 4 | TM4 | TM3 |
|  |  | Core 1 - General Wood | TW1 |  |
|  |  | Core 2 - General Wood | TW2 | TW1 |
|  | Indus Tech Timber | Unit 3 - Cabinet Work Specialised | TW3 | TW2 |
|  |  | Unit 4 - Cabinet Work Specialised | TW4 | TW3 |



## COMPULSORY COURSES <br> Towards the award of the Record of School Achievement

The satisfactory completion of the following courses are prescribed by the NSW Education Standards Authority as being a prerequisite for the award of the Record of School Achievement:

- English
- Mathematics
- Science
- Australian History
- Australian Geography
- Personal development, health and physical education.


## ENGLISH

All students study English in Years 9 and 10. English is taught in two one year courses which emphasise skills development and which include important preparation for the HSC and practical applications of English. Satisfactory completion of the requirements of the English course is necessary if the student is to move into Year 11 English.

English uses an integrated approach to the development of skills. Speaking, Listening, Reading and Writing skills are developed through the study of literature and language, through the use of performance and investigation of the mass media and different technologies.

It is especially important for students in Year 9 to realise that their work is an important stepping stone for the transition in senior English that a year of committed work in Year 9 will prepare students well for the demands of Year 10. Several Elective courses are being offered to allow students to expand their experiences in English.

## MATHEMATICS

The new Mathematics Syllabus provides a common understanding of the value and importance of mathematics for student learning. The aim is to enable students to become confident users of mathematics, learning and applying the language of mathematics to communicate efficiently and effectively.

The new NSW Mathematics K-10 syllabus for the Australian Curriculum will be delivered to Year 9 in 2024 and Year 10 in 2025. The Mathematics Syllabus for Years 9 and 10 bridges the gap between junior secondary and senior secondary courses of Mathematics. Students completing Year 8 are at various stages in the development of their mathematical knowledge, understanding and skills. Some students demonstrate a high degree of conceptual understanding while other students still need to develop their basic numerical skills. The K-10 Mathematics Syllabus caters for a wide range of learning needs by having two substages, Core and Paths. These substages are not designed as prescribed courses and many different 'end points' are possible.

Paths includes the knowledge and skills from Core. It is recognised that some year 9 and 10 students will still be working towards achieving the outcomes from the Stage 4 course. These students will be catered for and a section of the Core course is a consolidation of the Stage 4 outcomes. Students will be placed into classes working towards the Core and Paths outcomes according to their mathematical ability demonstrated in Year 8. Students need to achieve the outcomes in Core before moving onto the outcomes for Paths. Students may be working at different levels in the various focus areas: Number and Algebra, Measurement and Geometry, Statistics and Probability, as well as the overarching Working Mathematically outcome. For example, a student may be working towards achieving the Stage 4 Measurement outcomes, but may be ready to work on the Core Number outcomes. Programming will be flexible to cater for the individual needs of students.

Mathematics Life Skills is another course offered to provide a relevant and meaningful program of study for a small percentage of students with special educational needs. This course caters for students who find the Mathematics Year 7-10 Syllabus outcomes and content not appropriate. The Mathematics Life Skills pathway continues through to Stage 6.

## Prior-to-school learning

Students bring to school a range of knowledge, understanding and skills developed in home and prior-to-school settings. The movement into Early Stage 1 should be seen as a continuum of learning and planned appropriately.
The Early Years Learning Framework for Australia describes a range of opportunities for students to develop a foundation for future success in learning.

## MANDATORY STUDY

Early Stage 1 - Stage 3
Mathematics K-10

## Mathematics <br> 7-10



## SCIENCE

Science, like English and Mathematics, is a compulsory course in Years 9 and 10. All students will be part of a core program taught outside the semester system (similar to Mathematics and English) where they have will have six lessons per fortnightly cycle over the two years. They will also sit for one compulsory semester course that is core Science work that will be completed in Year 10. Year 10 students will be allocated this Science course within their elective lines in either first or second semester.

The aim of the course is to provide an interest and enthusiasm for science as well as an appreciation of its role in finding solutions to contemporary science related issues and problems. The essential content is organised by strands.

## Working Scientifically

This is the skills strand and involves the processes of questioning and predicting, proposing hypotheses, planning and conducting investigations as well as processing and analysing data and information.

## Knowledge and Understanding

This is the essential content. This strand is studied in the appropriate scientific disciplines:

## Physical World

This is concerned with understanding the nature of forces and motion, matter and energy. Topics studied include electricity, motion and gravity and the electromagnetic spectrum.

## Earth and Space

Students will learn about components of the universe, the life cycles of stars and the big bang theory. They will study plate tectonic theory as well as earthquakes and volcanoes. Students will also explore the ways that humans use resources from the Earth and appreciate the influence of human activity on its surface and the atmosphere.

## Living World

An understanding of the living things will be developed by studying topics such as Genetics and Evolution, Human body systems and disease. Ecology of the local ecosystem will also be investigated and students should gain an understanding of the interdependence of living things and how they interact with each other and their environment.

## Chemical World

This is concerned with understanding the composition and behaviour of matter. The key concepts developed in this strand are developed in topics such as atomic theory, acids and bases and chemical reactions.

The Stage 5 Science course also has a focus on cross curriculum priorities to enable students to develop an understanding about the contemporary issues they face. These include Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia's engagement with Asia and Sustainability.

General Capabilities developed include:
Critical and creative thinking, ethical understanding, information and communication technology capability, intercultural understanding, literacy, numeracy and personal and social capability.

Finally, students in their Year 10 Core A course must complete a Student Research Project where they independently carry out a scientific investigation to demonstrate the extent to which they have developed skills in applying scientific methods.

## HUMAN SOCIETY AND ITS ENVIRONMENT

All Year 9 and 10 students must complete the mandatory Geography and History courses. Additional courses may be selected if desired.

## Geography

All Year 9 and 10 students must complete one of the Geography courses in each year. Year 9 Geography (mandatory) must be completed in Year 9 and Year 10 Geography (mandatory) must be completed in Year 10. Additional elective Geography courses may be selected if desired.

| Code: 9GEO | Year 9 Geography (mandatory) | Prerequisite: Nil |
| :--- | :--- | :--- |

In this course students complete two topics - Sustainable Biomes and Changing Places. In Sustainable Biomes, students investigate the distribution and physical characteristics of biomes, how humans alter biomes, how biomes are used to produce food, environmental challenges to food production for Australia and the capacity of the world's biomes to achieve sustainable food security. While in Changing Places, students investigate the causes and consequences of urbanisation, examine urban settlement patterns between Australia and another country, investigate reasons for and effects of internal migration in Australia and another country, investigate the reasons for and effects of international migration to Australia, and investigate the management and planning of Australia's urban future.

\section*{| Code: 10 GEO | Year 10 Geography (mandatory) | Prerequisite: 9GEO |
| :--- | :--- | :--- |}

In this course students complete two topics - Environmental Change and Management, and Human Wellbeing. In Environmental Change and Management students investigate the role and importance of natural environments, investigate human-induced environmental changes across a range of scales, investigate environmental management and then conclude with a comparative study with at least ONE other country focusing on one environment. While in Human Wellbeing, students investigate ways of measuring and mapping human wellbeing and development, investigate causes, issues and consequences of spatial variations in human wellbeing, investigate the reasons for and consequences of spatial variations in human wellbeing in Australia, and investigate initiatives to improve human wellbeing in Australia and other countries.

Fees: Nil
Contact Person: Mr N Fernandez

## History

All Year 9 and 10 students must select one of the Australian History courses in each year. Year 9 History (mandatory) must be completed in Year 9 and Year 10 History (mandatory) must be completed in Year 10. Additional elective History courses may be selected if desired.

| Code: 9 HIS | Year 9 History (mandatory) | Prerequisite: Nil |
| :--- | :--- | :--- |

Year 9 mandatory History course - Year 9 students follow the NSW Syllabus for the Australian Curriculum which investigates The Making of the Modern World, from 1750 to 1945, looking at how the world is transformed by ideas such as nationalism and imperialism and rapid change in the ways people lived, worked and thought. Students study the Industrial Revolution before a depth study of Australia at War in WWI and WWII. Students continue to develop their skills in source analysis, distinguishing different perspectives and research through a range of differing communication forms.

\section*{| Code: 10HIS | Year 10 History (mandatory) | Prerequisite: Nil |
| :--- | :--- | :--- |}

Year 10 mandatory History course - The Modern World and Australia looks at the development of the modern world from the end of WWII to the present. The Twentieth Century became a critical period in Australia's social, cultural economic and political development. Of significance is the struggle for human rights, including how rights and freedoms have been ignored, demanded or achieved in Australia and abroad. Students also work on a depth study with their class, either on the Holocaust or the nature of popular culture in post-war Australia and its impact upon society.
Fees: Nil
Contact Person: Mr P Hartman

## PERSONAL DEVELOPMENT, HEALTH AND PHYSICAL EDUCATION

All Year 9 and 10 students will study Personal Development, Health and Physical Education (PDHPE) for four periods per fortnight. Two of these periods are practical and the other two are theory classes.

The Theory Component consists of the following units:

## Year 9

- Remember the Titans (Supporting yourself, supporting others, leadership)
- Nutrition (Healthy food habits, health consumerism)
- Illicit Drugs (Cocaine, heroin, ecstasy, steroids)
- Alcohol (Drug use and abuse - Alcohol)
- Contraception (Contraception, sexual health, STDs)
- Fitness (Fitness testing, program design)


## Year 10

- A Beautiful Mind (Mental Health, Resiliency)
- Drinking, Driving, Surviving (Road safety, risk taking behaviours)
- Bullying and Harassment (Relationships)
- The Final Quarter (Discrimination)
- Headstrong (Mental health)

The Practical component will involve a variety of sports and activities including dance, football, netball, golf, mini tennis, weight training, softball, etc.

Students will also be involved for two periods each week in a sports program, which will include Grade competition against other schools, and/or participation in a range of non-competitive (intra school) sports. Sport attracts the usual costs to cover bus hire and entrance fees to some venues.

As well as the mandatory periods of PDHPE each fortnight and Sport, students have the opportunity to complete elective Semester units either as 'interest' units or as a pattern of two or more units which will then be listed as Physical Activity and Sports Studies (either 100 or 200 hours). See the electives section of this book for more details.

## NESA DEVELOPED COURSES <br> ELECTIVE COURSES

## CREATIVE AND PERFORMING ARTS

The Creative Arts and Performing Arts KLA comprises these subjects:

- Dance
- Drama
- Music
- Visual Arts
- Photography

Students undertaking any of the five subjects offered by the Creative and Performing Arts KLA as a 200 hour course will be required to complete four units of study in that Subject over Years 9 and 10. Two consecutive units of study in any of the five subjects will be counted as a 100 hour course. These subjects can be completed by undertaking Semester Units in accordance with the outlines in this booklet.

Level of Attainment: The level of attainment achieved by each student in all Creative and Performing Arts subject areas will be based on the guidelines as set out in individual syllabi and determined through the progressive development of the student over the duration of the course.

A number of the units which are listed in the following section of this booklet can be attempted by students as 'ONE-OFF' interest units.

In Visual Arts there is also a GATS Intensive Studio Practice course for gifted and talented students. This is a 100 hour, Year 10 course that encompasses advanced studio practice. Selected students will be offered an opportunity to submit a written application and portfolio of work samples. Themed units of work allow these students to express themselves effectively using elements of visual language through intensive experimentation in a variety of media and methods.

## Dance

Dance is offered in Stage 5 for students who are interested in dance and choreography while exploring a full range of body movement.
Performance is an integral part of this subject and students will be given the opportunity to perform at school assemblies, dance festivals and school concerts. The curriculum has a strong contemporary style as it's foundation with units of study also in the styles of Jazz, Musical theatre and lyrical.

Particular emphasis is placed on student participation in this subject, as students will be required to make a commitment to working in groups and in ensemble work.

## Unit Descriptions

| Code: CAA | Dance Performance | Prerequisite: Nil |
| :--- | :--- | :--- |
| Students will be introduced to the elements of Dance. Students will develop skills and appreciation in |  |  |
| composition and performance, which will be applied to Dance. Students will investigate the opportunities dance |  |  |
| provides for communication and expression when performing. Emphasis will be placed on performance and |  |  |
| composition. Students may have the opportunity to see a professional dance performance. |  |  |

Fees: $\$ 25$ Contact Person: Ms L Holt

| Code: CAB | Jazz and Musical Theatre | Prerequisite: Nil |
| :--- | :--- | :--- |

Students will master a range of movement skills relating to jazz dance. They may have the opportunity to attend Musical Theatre performances. Students will undergo the study of the history of Musical Theatre. Students will be required to perform in a dance item in the annual Creative Arts performance.
Fees: $\$ 25$ Contact Person: Ms L Holt

| Code: CAC | Contemporary and Lyrical | Prerequisite: Nil |
| :--- | :--- | :--- |

Students will master skills in dance technique in the genres of Lyrical and Contemporary dance. Students will develop their knowledge and application of the human dancing body and safe dance practice through the study of Contemporary dance.

Fees: \$25
Contact Person: Ms L Holt

| Code: CAD | Composition and Choreography | Prerequisite: Nil |
| :--- | :--- | :--- |
| Students will master a range of movement skills in relation to Contemporary dance. Students will focus and <br> develop skills in composition and choreography. Students will work to devise a piece for public performance. <br> Students will participate in the in-depth study of a choreographer. |  |  |

Fees: $\$ 25$ Contact Person: Ms L Holt

## Drama

In studying Drama, students will develop knowledge and understanding about drama and theatre and skills in making, performing in and evaluating a variety of dramatic forms and styles.

Objectives - Students will:

- Explore a range of imagined and created situations in a collaborative environment
- Use dramatic forms and conventions to engage an audience
- Appreciate the function and effect of drama and theatre and reflect on their personal drama experiences.

Students who elect to study Drama units must be aware that they will be required to participate fully in all performance aspects of the unit, some of which may be undertaken in out of school hours.

## Unit Descriptions

| Code: CDA | Drama - All the World's a Stage | Prerequisite: Nil |
| :--- | :--- | :--- |

This course equips students with new performance skills. Drawing upon an array of contrasting theatrical styles from 5th Century Greek Theatre and Commedia Dell'Arte to Melodrama and beyond, this course offers a range of learning experiences. A composite of techniques from these styles such as direct address, symbolism, expressionism, as well as elements of the supernatural are then incorporated into traditional realism as a means of investigating different approaches to theatre making.
Fees: \$25
Contact Person: Ms L Holt

\section*{| Code: CDB | Drama - Out of Your Mind | Prerequisite: Nil |
| :--- | :--- | :--- |}

This course builds upon students' understanding of improvisation through identifying key skills which define successful spontaneous performance. Working collaboratively to create, make and present ideas, students will develop and sustain character in performance through considered use of voice and movement as well as gaining skills in the structuring of devised works. Students focus on acting, directing and playwriting to determine the most effective ways, through trial and error, to generate original pieces of theatre. Confidence will be developed when answering the questions of; "Why am I creating this story, what does it mean to me and how am I am going to create it?"

Fees: \$25
Contact Person: Ms L Holt
Code: CDC $\quad$ Drama - Word of Mouth $\quad$ Prerequisite: Nil

Drawing upon a wide variety of texts, students will develop skills in the area of script interpretation and analysis in order to identify units of action, subtext, super-objectives and sub-objectives. From historical pieces involving period costume to contemporary dramas of every kind, all stages of the creative process will be examined to provide a practical understanding of and appreciation for the scripted performance.

Fees: $\$ 25$
Contact Person: Ms L Holt

## Code: CDD $\quad$ Drama - Putting on an Act $\quad$ Prerequisite: Nil

Improvising and playbuilding are the key methods that will allow students to collaborate and devise their own work in this course. Characters, ideas and themes will be explored through the structuring and performing in original pieces of theatre. Spontaneous, unscripted activities will build students' confidence in their ability to "think on their feet" and respond to a range of imagined scenarios. Exploring different narrative structures and theatrical styles will allow students to become not only accomplished storytellers but empowered meaning makers, capable of being an expressive force in the world.
Fees: $\$ 25 \times$ Contact Person: Ms L Holt

## Music

The aim of Elective Music is to enable students to respond with aural awareness and sensitivity, through a wide range of musical activities, developing competency as performers and creators of music. These courses can be completed in Year 9 or 10.

Each unit will integrate activities in performance, listening and composition, with assessments weighted evenly. In all courses, students will be encouraged to perform in a school instrumental group, as well as being expected to participate in all classroom performance activities, to enhance their understanding of ensemble performing.

| Code: CMA | Foundational Compositional Techniques | Prerequisite: A passion to sing or learn <br> an instrument |
| :--- | :--- | :--- |

In song writing and composition, students learn to acquire skills in both classical and modern music composition, arrangements and instrumentation. Students will investigate the various genres such as concert, media and film or staged productions. Students will learn different approaches to compositional structure and form and complete a portfolio of original work demonstrating knowledge of fundamentals.
Fees: \$25
Contact Person: Mr A Felton

| Code: CMB | Jazz \& Cultures | Prerequisite: A passion to sing or learn <br> an instrument |
| :--- | :--- | :--- |
| Prerequisite: A passion to sing or learn an instrument. <br> Students will develop skills and an understanding in jazz and improvisation and an appropriate level of <br> instrumental skill to facilitate its performance. Students will be acquainted with suitable and essential jazz <br> repertoire and its world context and learn how to use basic Music rules and chord progressions. |  |  |

Fees: \$25
Contact Person: Mr D Sirone

| Code: CMC | Music - Recording Industry Skills | Prerequisite: Nil |
| :--- | :--- | :--- |

This is a semester course that takes students through the process of writing, rehearsing and recording a song. Students will learn how to write a song and arrange it for various instruments and/or voices. They will rehearse a group to achieve their desired sound and then learn basic recording methods using the latest digital studio techniques. By the end of this course, each student will have produced a high quality recording of an original song. The level of skill in the area of performance is expected to vary from student to student.

All students are encouraged to be part of a CTHS Music Ensemble.
Fees: \$35
Contact Person: Mr D Sirone

| Code: CMD | Music - Let's Rock! | Prerequisite: A passion to sing or learn <br> an instrument |
| :--- | :--- | :--- |

Grab your guitar, pick up your drum sticks, and let's get ready to ROCK! Designed primarily as a Music Appreciation subject, this course delves into the world of Rock, exploring its early development through to modern times. Knowing how to play an instrument is not compulsory, but is advisable as this is a more performance based course. Students will form bands to learn how to perform in the Rock genre. This course can be used to further your musical studies of the Stage 4 Mandatory course.

All students are encouraged to be part of a CTHS Music Ensemble.

## Visual Arts

Visual Arts is a course that is offered for all students who wish to communicate their ideas visually through a wide variety of media. Each elective unit offered within Visual Arts has a practical and theoretical components and students are encouraged to experiment and refine their skills in the various media to produce a body of work which reflects development of their conceptual and practical abilities.

## Visual Arts - Painting

| Code: CVC | Masters of Painting | Prerequisite: Nil |
| :--- | :--- | :--- |

Focusing on the qualities of paint and a variety of techniques, students will create both stretched canvas and watercolour artworks. Our identity and the influence of the world around us will be a source of inspiration in the development of skills and techniques with paint. Numerous influencing masters through the history of art will be studied and appropriated, focusing on the relationship of the artist with their artwork, audience and world.
Student Contribution: \$45 $\quad$ Contact Person: Ms R Donoghue

| Code: CVD | Contemporary Expressive Painting | Prerequisite: Nil |
| :--- | :--- | :--- |

This course will explore a variety of contemporary painting practices and media. Students will make and study artworks that experiment with new techniques and a variety of materials to produce expressive paintings. Modern and Post Modern artist practice will influence the study with a focus on symbolic, semi-abstract and expressive concepts.

Student Contribution: \$45
Contact Person: Ms R Donoghue

## Visual Arts - Ceramics

| Code: CVE | Ceramics - Hand Building and Decorative Techniques | Prerequisite: Nil |
| :--- | :--- | :--- |

Students will explore hand-building techniques with clay including using coil, slab, carving and modelling. They will also explore various methods of surface decoration including under glazes and glazes and will learn about the properties of clay. Students will study works from a range of traditional ceramic artists. Exploration of ceramics from a variety of perspectives in relation to artist, artwork, audience and the art world will be made.

Student Contribution: \$45 $\quad$ Contact Person: Ms E Fugar

| Code: CVF | Ceramics - Form and Function | Prerequisite: Nil |
| :--- | :--- | :--- |
| This unit is designed to introduce the students to new methods of construction. Students will explore decorative <br> techniques and ceramics as a medium for sculptural expression and functional use. Further study of ceramic <br> artists will be undertaken with an emphasis on Contemporary ceramic artists and issues. |  |  |

Student Contribution: \$45
Contact Person: Ms E Fugar

| Code: CVM | Sculpture - Traditional Techniques | Prerequisite: Nil |
| :--- | :--- | :--- |

Students will explore a range of materials to produce expressive three dimensional works that reflect their own observations and responses to their environment. Students will also undertake the study of sculptors and sculptures from a variety of cultures, past and present from different artists viewpoints.
Student Contribution: \$45 $\quad$ Contact Person: Ms R Donoghue

| Code: CVN | Sculpture - Contemporary Techniques | Prerequisite: Nil |
| :--- | :--- | :--- |

Students will experience a variety of sculptural techniques such as carving and assemblage. They will study and examine work by contemporary sculptors. Students will be required to study the work of sculptors who work within the themes explored in this course. Analysis of specific artworks and investigation of different viewpoints of writers about artworks will be looked at.
Student Contribution: \$45
Contact Person: Ms R Donoghue

## Visual Arts - Digital Imaging

## Code: CVH $\quad$ Digital Imaging 1 <br> Prerequisite: Nil

The Digital Imaging Unit will introduce students to various software packages used by artists and real world applications to generate digital images. Emphasis is placed on mastering image manipulation using Adobe Photoshop. Students will be required to produce a number of completed digital artworks. They will examine all aspects of the planning and production of computer generated images. A unit of study will be undertaken exploring the utilisation of new technology by artists throughout history and the technical aspects of computers and software for graphics.
Student Contribution: \$45
Contact Person: Mrs Z Stace

| Code: CVI | Digital Imaging 2 | Prerequisite: Nil |
| :--- | :--- | :--- |

As well as expanding upon the knowledge and skills base already achieved in Digital Imaging, students will study design techniques both traditional and computerised. They will also look at the expressive potential of this technology utilising Wacom Graphic tablets and software such as Adobe Illustrator. Students will also be introduced to the potential of electronic art forms using advanced 3D rendering techniques. They will produce an individual presentation researching the work of a chosen artist utilising this technology and enhance their illustrative skills using laser cutting techniques.
Student Contribution: \$45
Contact Person: Mrs Z Stace

| Code: CVJ | Film and Video | Prerequisite: Nil |
| :--- | :--- | :--- |
| Students will be making a series of short films using compilations of still images, animation software, digital and |  |  |
| drone footage. They are required to study film making and to explore a variety of film genres. Students will |  |  |
| examine techniques used by film makers and critique many films. Film editing techniques will be learnt to |  |  |
| assemble finished film footage. Students will work out of the multi media lab. Emphasis will be placed on the |  |  |
| role of film and video as an art form and the enormous variety of specialist career opportunities available in this |  |  |
| industry. |  |  |

## Visual Arts - Drawing and Illustration

| Code: CVA | Drawing and Illustration 1 | Prerequisite: Nil |
| :--- | :--- | :--- |

This course will explore drawing as a medium in traditional materials using contemporary techniques. Students will use graphite pencil, pastels and coloured pencil techniques in the realistic depiction of form and will apply a variety of techniques to produce drawings based on objects. They will develop skills in the depiction of realism and use texture and shadow to give the illusion of 3D form. An introduction to perspective drawing and human figures in proportion will be made through a series of guided drawings. The studying component will examine the works of artists who use a variety of drawing materials and techniques. They will explore the practice of an artist and how to analyse and interpret art from a range of perspectives.

| Student Contribution: $\$ 45$ | Contact Person: Ms K Jaeger |
| :--- | :--- |


| Code: CVB | Drawing and Illustration 2 | Prerequisite: Nil |
| :--- | :--- | :--- |

This elective will explore expressive materials and techniques used in contemporary drawing. Students will create a series of artworks using charcoal, oil pastels and chalk pastels to develop and understating of composition, lighting and form. They will create a series of small drawings used to communicate a theme which will utilise a variety of illustrative techniques and materials including ink, water colour and coloured pencil. Emphasis will be placed on the principles of art, composition and design. In the studying component of the course, students will study in detail the practice of a traditional or contemporary artist and explore the relationship between the artwork-artist-world and audience.

Student Contribution: \$45
Contact Person: Ms K Jaeger

## Visual Arts - Printmaking

| Code: CVK | Printmaking | Prerequisite: NIL |
| :--- | :--- | :--- |

Students will explore printmaking and its potential for making artworks. A number of print techniques will be explored including relief printing lino, intaglio and screen printing. Students will learn about the history of printmaking and make links to its influence on contemporary practice. They will utilise a number of printmaking techniques to produce a series of artworks.
Student Contribution: \$45 $\quad$ Contact Person: Ms K Jaeger

| Code: CVL | Printmaking and Bookbinding | Prerequisite: Nil |
| :--- | :--- | :--- |
| Students will explore printmaking and its potential for making artworks. Students will explore collage and <br> bookmaking techniques and will use skills gained to produce a major work. Further study of printmaking artists <br> will be undertaken with an emphasis on contemporary printmaking artists. |  |  |

Student Contribution: \$45
Contact Person: Ms K Jaeger

## Visual Arts - GATS

GATS Intensive Studio Practice incorporates intensive experimentation with a large range of materials and methods. Themed units of work will allow these gifted students to express themselves effectively using elements of visual language. Literacy concepts and scaffolds will assist with modelled critical responses to artworks.

This is a 100 hour elective, Year 10 course that encompasses advanced studio practice. Students will be offered an opportunity to submit a written application and portfolio of work samples to apply for this course.

| Code: CVG1 | GATS - Intensive Studio Practice 1 | Prerequisite: Nil |
| :--- | :--- | :--- |

Life Drawing and Sculptural Installation - In this unit of work students will learn the skills of life drawing in a variety of media. The course focuses on promoting students in their area of strength and choice of materials, to produce a series of artworks in both 2D and 3D media. They will develop a series of artworks which will be documented in an environment installation.
Student Contribution: \$45
Contact Person: Ms R Donoghue

| Code: CVG2 | GATS - Intensive Studio Practice 2 | Prerequisite: Nil |
| :--- | :--- | :--- |

Identity Personal Interest Project (PIP). This unit of works allows students to select from 12 expressive media forms or a combination of media areas, eg painting, sculpture, film, photography, etc. They will develop a series of artworks which they will resolve, present and curate into a gallery exhibition.
Student Contribution: \$45
Contact Person: Ms R Donoghue

## Visual Arts - Photography

| Code: CPA | Photography - The Wet Darkroom | Prerequisite: Nil |
| :--- | :--- | :--- |

The aim of this unit is to introduce students to creative and technical aspects of black and white photography. It is advised that only students who can manage their time effectively and are self-directed learners will be successful in this course. The students will work in the darkroom and classroom, learn to operate a 35 mm camera and to take effective photographs. They will also learn basic darkroom techniques i.e. to develop their own film and print photographs. A unit of theoretical study will be undertaken examining technical aspects of photography and research the work of photographic artists. Students will explore a variety of image making techniques using photosensitive materials. While students will be able to use school cameras in class, no overnight borrowing will occur.
Student Contribution: \$60
Contact Person: Mr S Duggan

| Code: CPB | Digital Photography | Prerequisite: Nil |
| :--- | :--- | :--- |
| This course will expand on basic photography skills through the exploration of experimental techniques to |  |  |
| manipulate images. Students will have the opportunity to gain skills in digital imagery and associated software. |  |  |
| This course intends to explore photography and digital images in both theoretical and practical studies. Students |  |  |
| will be required to undertake detailed documentation of their art making in an online portfolio, as well as |  |  |
| completing in depth studies of artists who use photography, electronic media and digital manipulation to make |  |  |
| art. Exploration of photography from a variety of perspectives in relation to artist, artwork, audience and the art |  |  |
| world. |  |  |

Student Contribution: \$60
Contact Person: Mrs Z Stace

## HUMAN SOCIETY AND ITS ENVIRONMENT

There are no prerequisites for the study of any particular course. Students may choose additional Semester Study Units offered in any HSIE Subject.

To facilitate access to resources teachers have produced workbooks for a number of HSIE courses. These are purchased by students for a small fee.

## Commerce, Geography, History - Independent Study

## HSIE Independent Unit of Study

Prerequisite: By Application
In Semester 2 of each year Stage 5 students may apply to undertake an independent unit of study in any of Commerce, Geography and History. The most suitable candidates would be those with a strong interest in expanding their knowledge of a particular topic area or those who wish to extend their skills in the use of particular technologies. Potential candidates would also need to possess the ability to work with minimal supervision. Only a limited number of students are accepted into this program, which is undertaken in lieu of their timetabled Semester 2 course.
Do not apply for this course on your course selection form.

## Commerce

Students may select any number of Commerce Units over Years 9 and 10 as interest electives. To complete a Commerce course over Years 9 and 10 you are required to complete the following:

100 HOURS: Students must complete either:

1. Smart Spending and Earning (core 1) OR Markets and the Legal System (core 2) plus
2. One optional unit (or the other core unit)

These two units may be done in any order at any time over Years 9 and 10. However, 9HCB20 Markets and the Legal System is more suited to Year 10 students and, if chosen, should be undertaken in that year.

## 200 HOURS: Students must complete both core units

1. Smart Spending and Earning and Markets and the Legal System plus
2. Two optional units.

## Unit Descriptions

| Code: HCA | Core 1: Smart Spending \& Earning | Prerequisite: Nil |
| :--- | :--- | :--- |

In this course students complete two topics - Consumer and Financial Decisions and Employment and Work Futures. In Consumer and Financial Decisions, students study the nature of commerce, consumer and financial decisions, consumer protection, financial management and current issues. While in Employment and Work Futures, students examine work and wellbeing, the workplace, rights and responsibilities in the workplace, and current issues.
This course is compulsory for students studying the 200 hour elective. If students are undertaking the 100 hour elective, they must either study this course or HCB - Core 2: Markets and the Legal System.

| Code: HCB | Core 2: Markets \& the Legal System | Prerequisite: Nil |
| :--- | :--- | :--- |
| In this course students complete two topics - The Economic and Business Environment and Law, Society and |  |  |
| Political Involvement. In The Economics and Business Environment, students learn about the nature of the |  |  |
| economy, the nature of markets within the economy, interactions within markets and current issues. While in |  |  |
| Law, Society and Political Involvement, students examine the role and structure of the legal system, law reform, |  |  |
| political action and decision making, participation in the democratic process, and current issues. |  |  |
| This course is compulsory for students studying the 200 hour elective. If students are undertaking the 100 hour |  |  |
| elective, they must either study this course or HCA - Core 1: Smart Spending and Earning. This course is more |  |  |
| suited for students in Year 10. |  |  |

Fees: Nil
Contact Person: Mr N Fernandez

| Code: HCC | Option 1: Running a Business | Prerequisite: Nil |
| :--- | :--- | :--- |

In this course students complete two topics - Promoting and Selling and Running a Business. In Promoting and Selling, students learn about the selling process, targeting consumers, selling techniques and current issues. While in Running a Business, students examine what an entrepreneur is, planning for success, business operations, maintaining financial records and current issues.
Fees: Nil
Contact Person: Mr N Fernandez

\section*{| Code: HCD | Option 2: Independence \& Travel | Prerequisite: Nil |
| :--- | :--- | :--- |}

In this course students complete two topics - Travel and Towards Independence. In Travel, students learn about the nature of tourism, planning a trip, developing an itinerary, solving problems related to travel and current issues. While in Towards Independence, students discuss considerations when moving from home, evaluate accommodation options, explain the responsible management of finance, major purchases, importance of community involvement and current issues.

| Code: HCE | Option 3: Law in Action | Prerequisite: Nil |
| :--- | :--- | :--- |
| In this course students complete two topics - Law in Action and International Law in Action (School Developed |  |  |
| Option). In Law in Action, students learn about contact with the law, rights and responsibilities of individuals, |  |  |
| resolving disputes and current issues. While in International Law in Action, students will examine the role of the |  |  |
| United Nations (UN), structure and organs of the UN, other intergovernmental organisations with global |  |  |
| influence (e.g. G20, WTO, ASEAN, NATO, etc), human rights, and other global issues. |  |  |

Fees: Nil
Contact Person: Mr N Fernandez

| Code: HCF | Option 4: The Economy \& Investing | Prerequisite: Nil |
| :--- | :--- | :--- |
| In this course students complete two topics - Our Economy and Investing. In Our Economy, students examine |  |  |
| the indicators to measure the performance of the Australian economy, investigate Australia's major trading |  |  |
| partners, discuss the global influences on the Australian economy and analyse current issues. While in |  |  |
| Investing, students learn about the reasons for investing, investment options, investment planning, the financial |  |  |
| services industry and current issues. |  |  |

Fees: Nil
Contact Person: Mr N Fernandez

## Elective Geography

The following units are interest electives in Geography that can be undertaken in addition to the compulsory Stage 5 Geography courses (9GEOA and 10GEOB). They are ideal for students who enjoy Geography. These units can be undertaken at any time during Years 9 and 10.

| Code: HGA | Disasters | Prerequisite: Nil |
| :--- | :--- | :--- |
| Have you ever been in an earthquake, volcano eruption, hurricane, nuclear accident or terrorist attack? In this |  |  |
| unit we examine these natural and man-made phenomena, how they occur, why they occur, how people |  |  |
| respond and the impact they have on people's lives. Students will also utilise a range of geographical skills to |  |  |
| survive a zombie apocalypse in a zombie based learning unit. |  |  |

Fees: Nil
Contact Person: Mr N Fernandez

| Code: HGB | Global Issues | Prerequisite: Nil |
| :--- | :--- | :--- |

This unit examines significant geographical issues affecting our world. There is an emphasis placed on the issues of the $21^{\text {st }}$ century where we investigate a future without oil, a future without jobs in an automated world, the consequences of the overpopulation, as well as Human Rights. Students will also get the opportunity to develop their own inquiry questions that examine global issues of their choosing from around the world.
Fees: Nil
Contact Person: Mr N Fernandez

## Elective History

The following units are interest electives in History that can be undertaken in addition to the compulsory Stage 5 History courses (9HIS and 10HIS). They are ideal for students who enjoy History. These units can be undertaken at any time during Years 9 and 10.

Making History is a 100 hour course. You must select Making History 1 and Making History 2.

| Code: HHM1 | Making History - Medieval 1 | Prerequisite: Nil |
| :--- | :--- | :--- |
| The first part of a 100 hour course, Making History 1 is a hands on, project based course that integrates skills |  |  |
| and knowledge from across subject areas to recreate the medieval world. Think STEM with an historic theme. |  |  |
| In this first semester, students look at the technologies and material culture of the peasantry and craftsmen as |  |  |
| well as the medieval church. They will plan a medieval banquet and create all the components required, from |  |  |
| food and clothing to board games and entertainment. In Making History 1, students will learn about historic |  |  |
| book binding and leatherwork, textiles and food, as well as the creative and performing arts. This is a hands- |  |  |
| on subject suitable for anyone interested in learning about the medieval world in a fun and engaging way, and |  |  |
| willing to step out of their comfort zone and learn new skills. |  |  |

Fees: \$70
Contact Person: Mr P Hartman

The second part of a 100 hour course, Making History 2 is a hands on, project based course that continues the learning of knowledge and skills from Making History 1. In this course, students will work towards the planning and execution of a medieval fair and tournament at the end of the semester. The focus is on the nobility and men-at-arms of the medieval world, and students will create shields and helmets, and learn about archery and sword-fighting in a safe and supervised environment. This is a hands-on subject suitable for anyone interested in learning about the medieval world in a fun and engaging way, and willing to step out of their comfort zone and learn new skills.
Fees: $\$ 70$
Contact Person: Mr P Hartman

\section*{| Code: HHA | Archaeology: Digging up the Past | Prerequisite: Nil |
| :--- | :--- | :--- |}

Do you prefer reading about History or would you like to get your hands dirty by Digging up the Past? This unit explores the discipline of archaeology, where History and Science meet. We will investigate ancient sites, long forgotten tombs and buried treasures. A perfect subject for those who like hands on learning and are interested in Prehistory and Ancient History.

| Fees: Nil | Contact Person: Mr P Hartman |
| :--- | :--- |


| Code: HHB | Life in the Classical World | Prerequisite: Nil |
| :--- | :--- | :--- |
| This course will help you discover what it was like living in Ancient Greece and Rome. Explore the world of the |  |  |
| Greek gods, and find out how you might call on their luck and protection. Discover what life was like for a Greek |  |  |
| woman or a Roman slave. Make a visit to the Greek theatre or spend an afternoon watching gladiatorial games |  |  |
| at the Colosseum in Rome. Meet a Greek philosopher like Socrates or a Roman General like Caesar. Find out |  |  |
| about the dress, customs, food, entertainment (and much more) of the Mediterranean world from the Golden |  |  |
| Age of Athens (500BCE) until the decline of Rome (400CE). A must for those interested in Ancient History! |  |  |


| Fees: Nil | Contact Person: Mr P Hartman |
| :--- | :--- |


| Code: HHC | Technology of Warfare | Prerequisite: Nil |
| :--- | :--- | :--- |

Ever wondered why our wars have become more devastating over the centuries? Because of technology. This unit will examine warfare over time and how technology has influenced the type of, and reasons for, warfare. Wars from ancient and medieval times through to the $20^{\text {th }}$ Century and contemporary times will all be examined in relation to the tools and tactics of warfare.
Fees: Nil
Contact Person: Mr P Hartman

| Code: HHD | History's Mysteries | Prerequisite: Nil |
| :--- | :--- | :--- |

An examination of the Unknown, Unanswerable or Simply Bizarre!! This course has no defined form and is thus a mystery in itself. However, what we can guarantee is a semester of History like no other. You could be taken in search of the real Dracula or the mysteries of the Maya. You could try to unravel the many questions surrounding Stonehenge or ponder the last days of the Iceman. Sift through the evidence surrounding the murder of the Romanovs or follow in the footsteps of Jack the Ripper. Go in search of Lassiter's Reef or retrial Lindy Chamberlain. Suitable for all students who enjoy drama, intrigue and problem solving.
Fees: Nil
Contact Person: Mr P Hartman

| Code: HHE | History on Screen | Prerequisite: Nil |
| :--- | :--- | :--- |

Do you love watching movies and playing computer games? Nowadays, most people learn about the past through films, TV shows and games, so in this unit we explore how valuable these media are in the study of History. We will undertake film studies, such as Troy, Gladiator or A Knight's Tale, look at the role of Propaganda films in Nazi Germany and North Korea, and explore how History is portrayed in computer games such as Battlefield, Civilisation, Assassins Creed and more. A great course for film buffs and gamers alike!
Fees: Nil
Contact Person: Mr P Hartman

| Code: HHF | Forgotten Histories | Prerequisite: Nil |
| :--- | :--- | :--- |
| Ever wondered why History seems to be so full of dead, white men? Not anymore! In this course you'll learn |  |  |
| about overlooked explorers, dismissed discoverers and forgotten influencers on major historical events. We |  |  |
| reconsider who we normally think of as our heroes and the places we think matter. This is perfect for students |  |  |
| who want to think about things from a different perspective and will give you an opportunity to undertake in |  |  |
| project based learning, designed to equip you with skills you need for the senior school. |  |  |

## Aboriginal Studies

| Code: AB1 | Aboriginal Studies 1 | Prerequisite: Nil |
| :--- | :--- | :--- |

This unit focuses on the diversity of Aboriginal cultures and identifies the factors that contribute to their development and expression. Through this course, students examine the diverse methods of Aboriginal social and cultural expression through a core section and an option selected by the teacher and class. Students will also undertake a case study requiring independent research and communication skills. This unit is suited to students interested in social and cultural issues.
Fees: Nil $\quad$ Contact Person: Mr P Hartman

| Code: AB2 | Aboriginal Studies 2 | Prerequisite: AB1 |
| :--- | :--- | :--- |
| This unit focuses on Aboriginal Peoples and human rights, with emphasis on the importance of self- |  |  |
| determination and autonomy. Through this course, students examine the relationship of human rights to self- |  |  |
| determination and autonomy through a core study and an option selected by the teacher and class. Students |  |  |
| undertake a case study which allows them to develop their independent research and organisational and |  |  |
| communication skills. This unit is suited to students interested in social, cultural, historical and legal issues. |  |  |
| Fees: Nil | Contact Person: Mr P Hartman |  |

## LANGUAGES OTHER THAN ENGLISH

## General KLA Information

Learning another language is an ideal way of developing skills and knowledge that are useful in a global society and multicultural Australia. Knowledge of a second language also contributes to a student's understanding of their first language. LOTE courses build on the listening, speaking, reading and writing skills developed in Year 8. Students can expect to achieve greater levels of communication skill in their chosen language whilst enhancing their cultural understanding.

Students can participate in email and collaborative projects with CTHS partner-schools in China, France and Japan. Opportunities for exchange are available for interested Year 10 students.

## Prerequisites

100 hours of study of the selected language (approx. one school year) is required for entry to Level 3 courses. 100 hours is usually completed in Year 8 language courses. Students without this background of study should consult the Head Teacher.

## Progression

Most students of LOTE begin with a Level 3 course (in Year 9) and proceed to Level 6 in Year 10. Variations are possible and should be discussed with the Head Teacher.

It is important to note that these courses are part of a four-year continuum leading to the HSC, and that students must have completed two years of the language in Stage 5 to be eligible to study the language in Years 11 and 12. Students intending to study a Year 10 Language course must complete 100 hours (L3 and 4) of Language courses or equivalent proficiency.

Students who wish to take up a new language course for their HSC, can choose a beginners course. Beginners courses are for students who have had no more than 100 hours (Stage 4) study of the language at the secondary level or equivalent. CTHS offers Chinese, Japanese and French Beginners courses.

Language Class Codes (recommended progression)

| Language | Year 9 | Year 10 |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Semester 1 | Semester 2 | Semester 1 | Semester 2 |
| French | LF3 | LF4 | LF5 | LF6 |
| Japanese | LJ3 | LJ4 | LJ5 | LJ6 |
| Chinese | LC3 | LC4 | LC5 | LC6 |
| Chinese <br> Extension | LCE3 | LCE4 |  |  |

The Chinese Extension class is for Chinese heritage students born and educated in Australia. These students typically can listen and speak broken Chinese and have some reading and writing ability.

## French

## Unit Descriptions

## Code: LF3 $\quad$ French Level 3 <br> Prerequisite: Year 8 (100 hrs) or equivalent

Topics: Ordering food in a restaurant; festivals and celebrations; arranging to meet; daily routines; teenagers; hobbies and activities.

Skills:

- Giving an opinion; expressing preferences
- Describing occasions and daily routines
- Describing appearances and personality
- Talking about leisure activities
- Asking questions
- Making notes
- Agree/give excuses; reply formally
- Writing a script
- Using a French/English dictionary.

Fee: Student Workbooks $\$ 30-\$ 40$ per year $\quad$ Contact Person: Mrs M Arkins

| Code: LF4 | French Level 4 | Prerequisite: LF3 or equivalent |
| :--- | :--- | :--- |

Topics: Clothing and fashion; shopping; directions; transport; holidays.
Skills:

- Using expressions for shopping
- Using expressions of time and place
- Describing different forms of transport
- Describing locations and facilities around a town
- Describing the weather
- Using email / letter writing appropriately - formal/informal
- Self-description
- Talking about the future.

Fee: Student Workbooks \$30-\$40 per year
Contact Person: Mrs M Arkins

## Code: LF5 $\quad$ French Level $5 \mathrm{Prerequisite:} \mathrm{LF4} \mathrm{or} \mathrm{equivalent}$

Topics: Around the home; different types of accommodation; earning money; recounting past events.
Skills:

- Describing one's home
- Describing household tasks
- Describing ways in which teenagers may earn money
- Narrating past events.

Fee: Student Workbooks \$30-\$40 per year $\quad$ Contact Person: Mrs M Arkins

| Code: LF6 | French Level 6 | Prerequisite: LF5 or equivalent |
| :--- | :--- | :--- |

Topics: Health and physical activities; environment; relationships with others; future plans.
Skills:

- Talking about sports and staying healthy
- Describing injuries and visiting the doctor
- Comparing things in the past with the present
- Talking about the environment
- Planning future events.

Fee: Student Workbooks \$30-\$40 per year
Contact Person: Mrs M Arkins

## Japanese

Unit Description

Code: LJ3 | Japanese Level 3 | Prerequisite: Year 8 (100 hrs) or equivalent |
| :--- | :--- | :--- |

Topics: Millestones (Growing up), Language studies, Nationalities. Fast food in Japan and Australia, Shopping (Department stores in Japan), Katakana scripts.

Skills:

- Have a conversation about past events
- Discuss your nationality, birthplace and where you grew up
- Ask and say how old you were when starting an activity
- Discuss your favourite fast foods and talk about healthy food options
- Discuss where you shop and why you shop there
- Katakana scripts.

Fee: Student Workbooks \$30-\$40 per year $\quad$ Contact Person: Mrs M Arkins

\section*{Code: LJ4 | Japanese Level 4 | Prerequisite: LJ3 or equivalent |
| :--- | :--- | :--- |}

Topics: Leisure activities, Theme parks, city and country, Neighbourhood, Directions, Katakana scripts.

## Skills:

- Talk about what someone is doing now
- Arranging an outing
- Accepting and declining invitations
- Describe neighbourhood
- Discuss life in the city and life in the country.

Fee: Student Workbooks \$30-\$40 per year
Contact Person: Mrs M Arkins

## Code: LJ5

Topics: Trips, Travel time and transport, Part-time work, Spending money, Careers and aspirations, What you are good at and like to do.

Skills:

- Talking about how long one takes to travel from one place to another
- Talk about activities one did during a school trip
- Discuss what is allowed and one isn't allowed
- Talk about part time jobs and required skills
- Talk about how you spend your money.
Fee: Student Workbooks \$20 per year $\quad$ Contact Person: Mrs M Arkins

| Code: LJ6 | Japanese Level 6 | Prerequisite: LJ5 or equivalent |
| :--- | :--- | :--- |

Topics: Seeing your home through Japanese eyes, Cultural similarities and differences. Leisure and Holidays iitomo senior u1, Schools u3 iitomo senior, Student life (study, hobby and part time jobs) iitomo senior u4.

## Skills:

- Talk about one's favourite past times
- Research leisure activities for high school students both in Japan and Australia
- Talk about timetable, subjects, rules
- Describe school
- Describe student life, explain how you stay healthy, Discuss what you do to achieve a good study life balance
- Talk about part-time work
- Benefits of living a balanced life.

Fee: Student Workbooks $\$ 20$ per year
Contact Person: Mrs M Arkins

## Chinese

Unit Description

## Code: LC3 $\quad$ Chinese Level $3 \quad$ Prerequisite: Year 8 (100 hrs) or equivalent

Topics: Telling the time, location, shopping, clothing.
Skills:

- Telling the date and time
- Talking about leisure activities
- Daily routine
- Locating people and items
- Giving and accepting invitations
- Colours and clothing
- Shopping and asking the price
- Describing people's appearance.

Fee: Student Workbooks \$30-\$40 per year $\quad$ Contact Person: Mrs M Arkins

| Code: LCE3 $\quad$ Chinese Extension Level 3 | Prerequisite: Year 8 (100 hrs) or equivalent <br> \& can converse in simple Chinese |
| :--- | :--- |
| Topics: Telling the time, location, shopping, clothing, hobbies, travel. |  |
| Skills: <br> - Telling the date and time <br> - Talking about leisure activities <br> - Daily routine <br> - Locating people and items <br> - Giving and accepting invitations <br> - Colours and clothing <br> - Shopping and asking the price <br> - Describing people's appearance <br> - Talking about transportation <br> - Describing hobbies. |  |
| Fee: Student Workbooks $\$ 30-\$ 40$ per year |  |


| Code: LC4 | Chinese Level 4 | Prerequisite: LC3 or equivalent |
| :--- | :--- | :--- |

Topics: Countries, nationalities, languages, weather, clothing, daily routine, food, phone calls, weather description.

Skills:

- Ordering food
- Making phone calls
- Weather
- Describing people.

| Fee: Student Workbooks $\$ 30-\$ 40$ per year | Contact Person: Mrs M Arkins |
| :--- | :--- |

## Code: LCE4 $\quad$ Chinese Extension Level 4 Prerequisite: LCE3 or equivalent

Topics: Countries, nationalities, languages, weather, clothing, daily routine, food, phone calls, weather description.

Skills:

- Ordering food
- Making phone calls
- Weather
- Describing people
- Talking about all topics.
Fee: Student Workbooks \$30-\$40 per year $\quad$ Contact Person: Mrs M Arkins


## PERSONAL DEVELOPMENT, HEALTH AND PHYSICAL EDUCATION

As well as the mandatory periods of PDHPE each fortnight and Sport, students have the opportunity to complete elective Semester units either as 'interest' units or as a pattern of 2 or more units which will then be listed as Physical Activity and Sports Studies (either 100 or 200 hours).

The units are designed for those students with an interest in Sport, Human Anatomy and Physiology. Students planning careers in medicine, physiotherapy, nursing, sports training and coaching would receive great benefit from undertaking these courses.

There are no pre-requisites for any of the units and they may be studied in any order.
Please note due to the physical requirements of PDHPE Mandatory and Elective units and in an attempt to reduce injuries, students will be limited to completing no more than 50 hours (1 PDHPE elective class) per semester and no more than 100 hours (2 PDHPE elective classes) in any one year. Exception to this rule will be determined by the Head Teacher PDHPE on application and a case by case basis.

## All seven units are demanding in terms of workload and depth of content. <br> Students should not choose these courses in the expectation of "just doing a bit more PE". <br> High Performance courses can only count towards 50\% of Rosa awards, eg if you are doing 100 hours PASS, you can only do one High Performance course. If you are doing 200 hours of PASS, then two High Performance electives can count towards that award.

## Physical Activity and Sport Studies

| Code: PCR | High Performance - Cricket | Prerequisite: Nil |
| :--- | :--- | :--- |
| This course consists of 4 modules: |  |  |
| - Advanced skill development |  |  |
| - Tactics and Strategy |  |  |
| - History of Cricket |  |  |
| - Coaching and Officiating |  |  |
| Theory work comprises $20 \%$ of class time. The remaining time is devoted on practical sessions to develop the |  |  |
| various skills of cricket. Players need to have played cricket at club level. |  |  |

Fees: Nil
Contact Person: Mr J Perry

| Code: PSP | Sports Performance |
| :--- | :--- | Prerequisite: Nil $\quad$| This course consists of 3 modules: |
| :--- |
| - Body Systems and Energy for Physical Activity |
| - Enhancing Performance - Strategies and Techniques |
| - Lifestyle, Leisure and Recreation |
| Theory work comprises 50\% of class time with the remaining 50\% spent on practical activities relating to the |
| content being studied. |

Fees: Nil
Contact Person: Mr J Perry

| Code: PSC | Sports Coaching |
| :--- | :--- |
| This course consists of 3 modules: | Prerequisite: Nil |
| - Coaching |  |
| - Fundamentals of Movement Skill Development |  |
| - Australia's Sporting Identity |  |
| Theory work comprises 50\% of class time with the remaining 50\% spent on practical activities relating to the |  |
| content being studied. |  |
| Students will be involved in peer coaching as well as coaching students from John Purchase Public School. |  |


| Fees: Nil | Contact Person: Mr J Perry |
| :--- | :--- |


| Code: PSF | Sports Fitness |
| :--- | :--- |
| This course consists of 3 modules: | Prerequisite: Nil |
| - Technology, Participation and Performance |  |
| - Physical Activity for Health |  |
| - Issues in Physical Activity and Sport |  |
| Theory work comprises $50 \%$ of the class time. The remaining time is spent on practical activities relating to the |  |
| content. |  |

Fees: Nil
Contact Person: Mr J Perry

| Code: PSM | Sports Medicine |
| :--- | :--- |
| This course consists of 4 modules: | Prerequisite: Nil |
| - Sports Medicine |  |
| - Nutrition and Physical Activity |  |
| - Event Management |  |
| - Issues in Physical Activity for Health (Performance Enhancing Drugs) |  |
| Theory work comprises $66 \%$ of the class time. The remaining time is spent on practical activities relating to the |  |
| content. |  |

Fees:Nil $\quad$ Contact Person: Mr J Perry

| Code: PSO1 | High Performance - Soccer I | Prerequisite: Nil |
| :--- | :--- | :--- |
| This course consists of 4 modules: |  |  |
| - Advanced skill development |  |  |
| - Tactics and strategies |  |  |
| - The structure and organisation of soccer in Australia |  |  |
| Theory work comprises 20\% of the class time. The remaining time is spent on practical activities relating to the |  |  |
| content. Participants need to be playing soccer at competition level. |  |  |


| Fees: Nil | Contact Person: Mr J Perry |
| :--- | :--- |


| Code: PSO2 | High Performance - Soccer II | Prerequisite: PSO1 |
| :--- | :--- | :--- |

This course is an extension of the work covered in High Performance - Soccer I.
Playing skills are further developed. There is a greater emphasis on advanced tactics and formations as well as the development of coaching programs and sessions.
Fees: Nil $\quad$ Contact Person: Mr J Perry

| Code: PNB | High Performance - Netball | Prerequisite: Nil |
| :---: | :---: | :---: |
| Students should be currently participating in club competitions in Netball. <br> Modules will involve: <br> - Advanced Skill Development in Netball <br> - Tactics and Strategy in Netball |  |  |
| Fees: Nil |  | Contact Person: Mr J Perry |
| Code: PBB | High Performance - Basketball | Prerequisite: Nil |
| Students should be currently participating in club competitions in Basketball. <br> Modules will involve: <br> - Advanced Skill Development in Basketball <br> - Tactics and Strategy in Basketball |  |  |
| Fees: Nil |  | Contact Person: Mr J Perry |

## TECHNOLOGICAL AND APPLIED STUDIES

The Technology and Applied Studies Key Learning Area (TAS KLA) is the curriculum area that encompasses the subject areas of Design and Technology, Food Technology, Textiles Technology, Graphics Technology, Industrial Technology (focus areas available are Electronics, Automotive, Engineering, Art Metal, Multimedia and Timber) and Design and Technology STEM.

The extensive range of subject areas in this Key Learning Area all share the common thread of designing, problem solving and production. Students have the option of studying technology in specific focus areas relevant to individual needs and interests and to determine the depth and breadth of study within focus areas through a range of specialised modules.

Some courses have two core units which must be studied before the two specialised units can be studied. Students can choose to study the two core units to obtain a 100 hour accreditation in that course or by studying the two core units and the two specialised units to obtain a 200 hour accreditation in that course.

Students may elect a TAS course as an interest only subject. In this case they must complete the initial Core 1 unit, as any further studies in that area would require skills learnt in the Core 1 unit.

Most courses in this area involve a fee to cover student consumables. The amount is listed in the unit module focus description.

Prerequisites apply for most units in the Stage 5 TAS KLA. These are indicated in the unit module focus description.

## Agriculture

Students must complete all of Core A for the 100 hour course. This may be achieved by studying TAA with either TAB or TAC. Students with an interest in plants should complete the following program of study, 100 hour course TAA + TAB. Students with an interest in animals should complete the following program of study 100 hour course TAA + TAC.

Students must complete both Core A and Core B for the 200 hour course. This may be achieved by studying all units - 200 hour course TAA + TAB + TAC +TAD.


Interest course - Students with an interest in Agriculture may complete any course at any time independently of other courses.

| Code: TAA | Agricultural Systems | Prerequisite: Nil |
| :--- | :--- | :--- |

This unit will explore the relationship between soils, plants and animals. Students study two traditional agricultural systems - Sheep and Wool and Cropping and Pastures. The school sheep form the basis of the unit as animal production, plant production and soil management is studied. Students are invited to learn to drive the tractor.
Fee: \$20
Contact Person: Mr P Annetts

| Code: TAB | Plants in Agriculture | Prerequisite: Nil |
| :--- | :--- | :--- |

This unit looks at two important local agricultural industries - Ornamental Plants and Vegetable Production. Students study the skills necessary to propagate and successfully raise ornamental plants. Group vegetable plots form the basis of the very practical vegetable unit. Everything you have ever wanted to know about growing great plants at home.
Fee: \$20
Contact Person: Mr P Annetts

| Code: TAC | Animals in Agriculture | Prerequisite: Nil |
| :--- | :--- | :--- |

Students study two animal industries - Honeybees and Broiler Production. The school's bee hives are the basis of study for honey bees while students grow and sell a broiler chickens in the broiler unit. The management and husbandry methods used in many animals industries are studied and practiced.

Fee: \$20
Contact Person: Mr P Annetts

| Code: TAD | Agricultural Electives | Prerequisite: Nil |
| :--- | :--- | :--- |
| Interests and group dynamics will determine the topics to be covered. Some choices include: |  |  |
| Animal Studies - This is an extension on the Animals in Agriculture unit. A range of animal production systems |  |  |
| are studied. |  |  |
| Landscaping - Students study many of the aspects of good landscape design and incorporate them into a |  |  |
| student-centred project. |  |  |
| Horticultural Industries - Orcharding and hydroponics are the core to this unit. The skills and knowledge |  |  |
| covered in the Plants in Agriculture unit are developed and extended. |  |  |

## Child Studies - NESA Endorsed Course

Child studies will involve a number of styles of teaching including team work, practical experiences, student centered learning and caring for a virtual baby.
Assessment is largely based on project work and related assignments.
Students need to complete at least 2 units to achieve Child Studies (100 hours).


#### Abstract

Code: THA $\quad$ Birth, Babies and Newborn Care $\quad$ Prerequisite: Nil

This unit is an invaluable insight into the preparation people need to undertake when they plan to become parents. Students will gain an understanding of biological processes which are completed in order to make a baby, have a baby and care for a newborn baby. Additionally, students will learn how people can prepare as individuals, couples and families, when a new member is on the way. Students will also have an opportunity to care for a virtual baby and gain understanding from this experience. Along with this, students will learn how to prepare healthy, nutritious and well balanced food for introducing a baby to solid food.


Fees: \$60
Contact Person: Mrs L Robinson

| Code: THB | Toddlers, Tantrums and Children | Prerequisite: Nil |
| :--- | :--- | :--- |

This unit involves investigating the way babies grow and develop into toddlers and then young children. Students will be involved in a range of interactive activities which reflect the kinds of children's play and reasons for that play. An important focus is on childhood health and safety. There will be many practical experiences related to how young children learn and the types of activities which are appropriate for them. Additionally, students will be taken through the types of childcare facilities that are available and the ones in the local area. From this, students will be expected to provide babysitting for school functions to simulate work placement

Fees: \$35
Contact Person: Mrs L Robinson

| Code: THC | No brakes, burns or trauma | Prerequisite: Nil |
| :--- | :--- | :--- |

Students explore the factors that affect the health, safety and wellbeing of children. Students will identify hazards in various environments and evaluate strategies which aim to reduce harm. The role of legislation in promoting child safety will be reviewed as students plan for safety in environments including the home, play areas and near roads. This unit provides opportunities for students to design guidelines for safe home and play area development.

Fees: \$35
Contact Person: Mrs L Robinson

\section*{Code: THD | Programmed tots | Prerequisite: Nil |
| :--- | :--- |}

This unit explores the ways that babies, toddlers and young children learn about the world. It has practical activities of producing an interactive resource that progresses through age appropriate learning. Students will also learn about how different toys are now and speculate about how toys/learning may look in the future by prototyping an app.

Fees: \$35
Contact Person: Mrs L Robinson

## Graphics Technology

Graphics Technology involves the study of Technical Hand Drawing, and use of CAD software. Students engage in both manual and a variety of computer-based forms of image generation and manipulation. Graphics Technology develops students' technical and visual literacy, equipping them for participation in a technological world.

Students undertaking Graphics Technology (100 hour course) must complete the two core units TG1 and TG2. Students wishing to continue the study of Graphics Technology ( 200 hour course) need to complete TG1, TG2, TG3 and TG4 in order. Students studying Graphics Technology as a 50 hour interest course need to choose TG1.

Note: Graphics Technology is a completely separate course to Industrial Technology and Design and Technology STEM. A student may study Graphics Technology, as well as Industrial Technology - Engineering and Design and Technology STEM, for example.

| Code: TG1 | Core 1 - Graphics Technology | Prerequisite: Nil |
| :--- | :--- | :--- |

This unit is an introduction to graphic principles and techniques. It includes Australian standards, CAD principles, design in graphics, planning and construction, applied geometry, orthogonal drawing, pictorial drawing, rendering and product drawing.
Fee: $\$ 15$ includes all materials used. $\quad$ Contact Person: Mrs E Sarna

| Code: TG2 | Core 2-Graphics Technology | Prerequisite: TG1 |
| :--- | :--- | :--- |

This unit develops the knowledge covered in module 1 to a more advanced level. Students will look at career opportunities pathways in graphics. Students will work to produce 3D images using CAD based programs.
Fee: $\$ 15$ includes all materials used. $\quad$ Contact Person: Mrs E Sarna
Code: TG3 $\quad$ Graphics Technology - Option Module 3 $\quad$ Prerequisite: TG2

Students studying the 200 hr unit will study four Option Modules in TD3 and TD4 and may choose to undertake a student negotiated project as one of their four options. Option modules can be chosen from: Architectural Drawing, Australian Architecture, Cabinet and Furniture Drawing, Computer Aided Design and Drafting (CAD), Cartography and Surveying, Computer Animation, Engineering Drawing, Graphic Design and Communication, Landscape Drawing, Pattern Design, Product Illustration, Technical Illustration and Student Negotiated Project.
Fee: \$15 includes all materials used. $\quad$ Contact Person: Mrs E Sarna

| Code: TG4 | Graphics Technology - Option Module 4 | Prerequisite: TG3 |
| :--- | :--- | :--- |
| Please see TG3. | Contact Person: Mrs E Sarna |  |
| Fee: $\$ 15$ includes all materials used. |  |  |

## Food Technology

In accordance with the K-10 Curriculum Framework, the Food Technology Syllabus takes into account the diverse needs of all students. It identifies essential knowledge, understanding, skills, values and attitudes and involves students investigating food through practical experience and processes such as research, making and management.

Assessment is largely based on practical work with related assignment work and unit tests.

| Code: TFA | Healthy Living for Life | Prerequisite: Nil |
| :--- | :--- | :--- |

Food Selection and Health - Food is a source of health and energy, yet the basic nutritional facts are sometimes difficult to distinguish amid all the media hype. In this unit students gain an understanding of nutritional requirements and basic menu planning for optimal health. Students also investigate and evaluate controversial food issues and common nutritional myths in order to make more informed food choices. Students work collaboratively to carry out investigation and research and participate in practical activities that require them to prepare safe and nutritious foods to meet nutritional requirements such as adolescents.

Food for Special Needs - Nutritional needs vary as individuals move through the life cycle. In this unit students gain an understanding of an individual's changing nutritional requirements and the skills needed to select and prepare foods to meet nutritional well-being of all family members such as babies, toddlers and children, adolescents, vegetarians and sports people. A research project allows students to investigate an area of interest, and develop educational materials and foods that address the needs of a specific group.


| Code: TFB | Food for All | Prerequisite: Nil |
| :--- | :--- | :--- |

Food for Special Occasions -Food is an important part of any celebration regardless of culture or religion. In this unit students examine a range of special occasions such as birthdays, anniversaries, St Valentine's Day, Easter and Christmas and prepare foods unique to specific celebrations. Food presentation and service is a focus of the unit and students learn how to present and garnish foods appropriate to a given setting. Students submit a proposal for a large scale catering event and collaboratively host a celebration for a major school event.

Food Equity - Globally and locally not all people have equal access to food and basic living conditions. In this unit students examine food equity issues and world food distribution patterns. Students identify groups at risk of food inequity, aid agencies and their role in providing short term and long term relief. Students plan and prepare a variety of meals to meet the nutritional needs of specific at-risk groups.

Contact Person: Mrs L Robinson

| Code: TFC | The Business of Food | Prerequisite: Nil |
| :--- | :--- | :--- |

Food Trends - Food is a major consideration in consumer spending and an important part of the Australian lifestyle. In this unit students examine current food trends and factors that influence the appeal and acceptability of a range of foods. Historical perspectives are examined by investigating the development of recipe and food lifestyle publications over the past 100 years. Students identify trends in dining, food presentation and service over this period producing timelines that identify significant developments. Contemporary food lifestyle programs are viewed and students are asked to collaboratively produce a video food segment or magazine that showcases current food styling and presentation trends.

Food Product development - Food product development is a continuous process and is driven by consumer demand and market trends. In this unit students identify recent food product developments and consider changing food habits and the link to well-being. Students examine case studies and document the process of food product development. Students are given a design brief and asked to develop a food product and marketing campaign which addresses the food and lifestyle needs of a particular group. Students will test their product in a market research setting and evaluate its viability.

Fees: \$125
Contact Person: Mrs L Robinson

Code: TFD | Australian Cuisine | Prerequisite: Nil |
| :--- | :--- |

Food in Australia - A range of factors influence our distinct Australian cuisine. In this unit students examine the diverse range of foods offered in the Australian marketplace and identify the factors that influence this selection. Students investigate he traditional use of bush foods by Aboriginal peoples and design contemporary foods using bush ingredients. The unit will also focus on historical perspectives including early European settlements and multicultural influences on food selection and preparation. During practical activities students will have the opportunity to experiment with a range of ingredients available in the marketplace developing innovative approaches to Australian cuisine.

Food Service and Catering - The hospitality industry plays an ever -increasing role in providing food and employment. In this unit students examine a variety of catering industries by visiting a number of facilities, identifying their clientele and documenting their employment conditions and opportunities. The units focus is the practical application of catering principles, such as menu planning, customer service, food presentation and system development for large scale catering events. Students will gain an understanding of the hospitality industry and develop relevant food handling and presentation skills.

## Textiles Technology

Through the designing and creating of a range of textile projects, Textiles Technology gives students the opportunity to be creative and to explore the nature and uses of textiles in their world. Students will actively engage in learning about the properties of textiles, textile design and designers and the role of textiles in society. Historical and cultural uses of textiles continue to influence contemporary designers today and students will examine these influences as inspiration for their own work. The focus areas are fashion, costume, furnishings, textile arts and items such as toys, bags and accessories.

Assessment is largely based on project work and design portfolios with related assignments and unit tests. Students undertaking Textiles Technology (100 hours) MUST complete the core semester TT1 and one other semester unit.

Students undertaking Textiles Technology (200 hours) will complete all four semesters.

| Code: TTA | Casual, Street and Beachwear | Prerequisite: Nil |
| :--- | :--- | :--- |
| This unit will examine the casualisation of everyday clothing, with an in depth look at the creation of a capsule |  |  |
| wardrobe suitable for holiday wear. Students will be introduced to the use of commercial patterns and basic |  |  |
| garment construction techniques using woven fabrics. An investigation of design features will lead to students |  |  |
| developing their own style. The project work will include construction of a casual garment and non-apparel item |  |  |
| suitable for a holiday. Students will develop skills in professional designer portfolio presentation including |  |  |
| fashion drawing. |  |  |

Fees: $\$ 50$ Contact Person: Mrs W Sheppard

| Code: TTB | Textiles, Toys and Costume | Prerequisite: TTA |
| :--- | :--- | :--- |
| This unit will involve students creatively developing non-apparel design ideas. Projects could include soft toys |  |  |
| and dress up costumes. A variety of techniques such as gathering, toy construction, specialised fastenings and |  |  |
| novelty trims will be explored. |  |  |
| Students will investigate leading costume and their use of design to support characterisation, blends and |  |  |
| labelling requirements for textiles. |  |  |

Fees: $\$ 50 \quad$ Contact Person: Ms W Sheppard

| Code: TTC | Textile Artist | Prerequisite: TTA |
| :--- | :--- | :--- |
| This unit will study the creative processes used by Textile artists. Students will investigate and apply methods |  |  |
| of colouration and decoration of textiles. Techniques may include batik, marbling, printing, fabric painting, |  |  |
| appliqué, embroidery, computerised embroidery, quilting and digital heat transfer. Project work will focus on |  |  |
| creating a textile art piece or home furnishing, with inspiration being drawn from historical and cultural sources. |  |  |
| Students will examine the importance of recycling of textiles and investigate current trends in textile |  |  |
| sustainability. |  |  |

Contact Person: Mrs W Sheppard

| Code: TTD | Active Wear and French Technique | Prerequisite: TTA |
| :--- | :--- | :--- |

This unit will examine the growing popularity of sports-style clothing for casual wear - athleisure. Skills in this selection and use of knitted fabrics, such as jersey knits, pile knits (eg, fake fur) and tricot knits, are developed.

Textile design trends will be explored and students will engage in activities where they predict future trends in fashion and develop a visual presentation. An investigation of fibre and fabric structures will lead to an understanding of fabric properties and suitable end users.

Advanced students may elect to undertake project work in a focus area of interest and work independently.
Fees: $\$ 50$ Contact Person: Mrs W Sheppard

## Design and Technology

In accordance with the K-10 Curriculum Framework Design and Technology 7-10 syllabus, the study of Design and Technology takes into account the diverse needs of all students. The various focus areas provide opportunities for students to develop knowledge, understanding and skills in relation to Design and Technology in today's society. The modules develop knowledge and skills in design techniques, which are enhanced and further developed through the study of subsequent specialised modules.

Design and Technology Years 7-10 is an elective course designed to build upon the Technology Mandatory Years 7-8 course. Outcomes for Stage 4 have been included to allow flexibility for this schools who wish to offer the course in Years 7 and 8. Students engage in a range of practical activities as they design, manage, produce and evaluate quality designed solutions.

| Code: TDA | Amazing Young Fashion Designers | Prerequisite: Nil |
| :--- | :--- | :--- |
| This course is a mandatory course in the subjects of Design and Technology. In order for you to achieve 100 |  |  |
| hours in this subject you will need to complete the second mandatory course of TDB - Renovation Rescue. |  |  |
| This course is designed to introduce beginner drawers to Fashion Drawing. It is for those with creative ideas |  |  |
| about fashion to develop their understanding and skills. The course covers the principles of drawing fashion |  |  |
| figures and exploring the use of various colour mediums. Students will explore these skills through a variety of |  |  |
| contemporary design briefs such as Fairy Costumes and Fashion of the Future. Students will additionally |  |  |
| research modern Australian Designers and their approaches to sustainable design. |  |  |

Fees: \$30
Contact Person: Mrs L Robinson

| Code: TDB | Renovation Rescue | Prerequisite: Nil |
| :--- | :--- | :--- |
| This is the second course in the mandatory courses suite for the Design and Technology subjects. This must |  |  |
| be completed in order to achieve 100 hours in this subject, it is paired with TDA - Amazing Young Fashion |  |  |
| Designers. Students will investigate and develop designs in the area architecture. This will be delivered within |  |  |
| the theme of building design and renovation, students will examine and select appropriate furnishing, lighting |  |  |
| and colour schemes to enhance exterior and interior spaces. Various environments will be explored such as |  |  |
| houses, cafes and commercial establishments. Project work will involve students in preparing drawings, story |  |  |
| NESAs, visual presentations and scaled models of their ideas. |  |  |

Fees: \$30
Contact Person: Mrs L Robinson

| Code: TDC $\quad$ My Style | Prerequisite: TDA \& TDB |
| :--- | :--- |
| This course can only be selected if the two above courses have been completed. |  |
| This unit is to consolidate students understanding of the process of design in the area of fashion accessories. |  |
| They will develop their skills in digital design of fashion and digital presentation of fashion. Students will be |  |
| involved with developing fashion accessories digitally. Examples include shoes, handbags, hats and scarves. |  |
| Students will additionally investigate the work of leading Australian designers excelling in this industry. |  |

Fees: \$30
Contact Person: Mrs L Robinson

| Code: TDD | Red Carpet Fashions | Prerequisite: TDA \& TDB |
| :--- | :--- | :--- |

This course can only be selected if the two above courses have been completed.
The major focus of this course is to extend student's knowledge, understanding and skills in the area of design for the fashion industry. By applying the elements and principles of design, students will develop quality fashion designs leading to visual presentations. The work of past and current fashion designers incorporated into a study of historical and contemporary trends so that students can develop their own design style. Students will work collaboratively to develop a range of fashion for one aspect of the fashion industry.
Fees: \$30
Contact Person: Mrs L Robinson

## STEM - Design and Technology

Design and Technology education incorporates all STEM fields (Science, Technology, Engineering and Mathematics) into one unique subject. The subject focuses on utilising the design process to solve real world problems using relevant scientific and mathematical concepts. This is an NSW Education Standards Authority (NESA) Endorsed Course.

| Code: TST1 | STEM 1 | Prerequisite: Nil |
| :--- | :--- | :--- |
| In this introductory unit to D\&T STEM, students will begin by undertaking a range of small experimental |  |  |
| activities, introducing them to some basic D\&T STEM principles. Students will then move on to exploring |  |  |
| microelectronics and construct a robot using a systems approach, enabling the robot to perform identified tasks. |  |  |
| The second project will be based around Environmental Systems and sustainability. Students will research and |  |  |
| explore sustainable energy and materials to design and construct a mouse trap powered car. These projects |  |  |
| involve Computer Aided Design and Manufacturing, to produce parts which will allow their vehicles to compete. |  |  |

Fees: $\$ 50$ Contact Person: Mrs E Sarna

| Code: TST2 | STEM 2 | Prerequisite: TST1 |
| :--- | :--- | :--- |

In STEM 2, students will learn introductory electronics systems and basic structural engineering following the principles of D\&T STEM. In the electronics unit they will be constructing basic electronics circuits and learn about basic electronic principles by experimentation, including making an electric motor out of basic household materials. They will then move on to designing and producing a solar powered toy. The Structural Engineering component will have the students using DJI drones. They will learn how to program the drones to complete autonomous tasks. The final part of this unit will have the students applying STEM principles to design and build components for an obstacle course which they will program the drones to navigate.

| Fees: $\$ 50$ | Contact Person: Mrs E Sarna |
| :--- | :--- |


| Code: TST3 | STEM 3 |
| :--- | :--- | Prerequisite: TST2

Fees: $\$ 50 \quad$ Contact Person: Mrs E Sarna

| Code: TST4 | STEM 4 |
| :--- | :--- |
| Prerequisite: TST3 |  |
| Packaging. With consumerism at its heights, packaging plays a major role in society, from marketing aspects |  |
| to shipping configurations and disposal. In this unit students will explore a range of packaging materials, |  |
| processes and implications, including packaging machinery and environmental consequences through life- |  |
| cycle-analysis. They will use scientific and mathematical principles to design and construct a suitable packaging |  |
| for an object. |  |
| Student Negotiated Project. In this unit students are to realise and develop a Major Scientific Research Project. |  |
| In completing the project, students will draw on techniques and technologies from the previous STEM units to |  |
| produce a solution or answer to a contemporary scientific or technological problem. They will continually draw |  |
| on Engineering concepts, Scientific methodologies and Mathematical reasoning to inform the design and |  |
| production of their project. The research project is expected to be similar to a science fair concept, popular in |  |
| the United States. |  |

## Industrial Technology - Art Metal (Jewellery)

In accordance with the K-10 Curriculum Framework Industrial Technology 7-10 syllabus, the study of Art Metal takes into account the diverse needs of all students. The Art Metal focus area provides opportunities for students to develop knowledge, understanding and skills in relation to Jewellery, Fine Metalwork and associated industries.

The two Core units develop knowledge and skills in the use of materials, tools and techniques related to making Jewellery which are enhanced and further developed through further study in the subsequent modules.

Students undertaking Industrial Technology - Art Metal (100 hours) MUST complete two Core units TR1 and TR2.
Students undertaking Industrial Technology - Art Metal (200 hours) continue with TR3 and TR4.
Students undertaking Industrial Technology - Art Metal as an Interest subject for one semester choose: TR1

| Code: TR1 | Core 1 - Rings and Stone Setting | Prerequisite: Nil |
| :--- | :--- | :--- |
| This unit explores ring and pendant design and also the production of basic stone settings. Students will learn |  |  |
| to make Stone settings for both Cabochon and Facetted Stones, producing one off jewellery designs and |  |  |
| themed sets which complement the stone settings. Students will be assessed on the quality of their design |  |  |
| development and solutions. |  |  |

Fees: \$45
Contact Person: Mr S Skodras

| Code: TR2 | Core 2 - Enamelling and Etching | Prerequisite: TR1 |
| :--- | :--- | :--- |

In Enamelling and Etching, students will develop skills relating to the enamelling and etching processes such as sweat soldering and wire soldering techniques. They will produce pendants, rings and earrings made from sterling silver and other semi-precious metals. All project work is completed individually, the focus will be for students to research and develop their own designs.
Fees: $\$ 45 \quad$ Contact Person: Mr S Skodras

| Code: TR3 | Chain Making and Resin Jewellery | Prerequisite: TR2 |
| :--- | :--- | :--- |

Students will develop skills in Chain Making and Resin Jewellery work. The emphasis will be on creating an original chain using silver as well as the development of a custom clasp. Students will also develop a resin casting project. This unit involves intricate silver smithing skills. Students will be assessed on the quality and execution of their designs and related processes.
Fees: $\$ 45 \quad$ Contact Person: Mr S Skodras

| Code: TR4 | Casting in Jewellery Design | Prerequisite: TR2 |
| :--- | :--- | :--- |

Students learn about state of the art casting techniques. They will create stunning pieces of work. This unit utilises industry specific technology and jewellery-making techniques. Students will be assessed on creativity, skill development and the quality of their final products.
Fees: $\$ 50 \quad$ Contact Person: Mr S Skodras
In each of the units students will work either as individual or in small groups completing projects, which incorporate the elements of design. Each project will follow the design process and a folio of each project will be developed and submitted for assessment.

## Industrial Technology - Automotive

In accordance with the K-10 Curriculum Framework Industrial Technology 7-10 syllabus, the study of Automotive takes into account the diverse needs of all students. The Automotive focus area provides opportunities for students to develop knowledge, understanding and skills in relation to the Automotive and associated industries.

The two Core units develop knowledge and skills in the use of materials, tools and techniques related to automotive maintenance and repair which are enhanced and further developed through the study of subsequent specialised modules in automotive technology

Students undertaking Industrial Technology - Automotive (100 hours) MUST complete two Core units TV1 and TV2.
Students undertaking Industrial Technology - Automotive (200 hours) continue with TV3 and TV4.
Students undertaking Industrial Technology - Automotive as an Interest subject for one semester choose: TV1

| Code: TV1 | Core 1-Automotive 1 | Prerequisites: Nil |
| :--- | :--- | :--- |

This is an introductory unit where students study simple two and four stroke engines. They use basic workshop tools and equipment, identify components, recognise functions and undertake simple fault finding. Projects will be undertaken individually or in groups.

| Fees: $\$ 30$ | Contact Person: Mr P Craft |
| :--- | :--- |


| Code: TV2 | Core 2-Automotive 2 | Prerequisites: TV1 |
| :--- | :--- | :--- |

Students study complex engines including 6 and 8 cylinder, rotary and diesel. They use basic workshop tools and equipment, identify components, recognise functions and undertake simple fault finding. Projects will be undertaken individually or in groups.
Fees: $\$ 30$ Contact Person: Mr P Craft

| Code: TV3 | Unit 3 - Automotive 3 - Specialised | Prerequisites: TV2 |
| :--- | :--- | :--- |

Students study jet power and aerodynamics. They use basic workshop tools and equipment, identify components, recognize functions and undertake simple repairs. Tools, materials and related technologies will be used in the study of these systems. Students will also study alternative power sources.
Fees: \$30
Contact Person: Mr P Craft

| Code: TV4 | Unit 4-Automotive 4-Specialised | Prerequisites: TV3 |
| :--- | :--- | :--- |

Students will conduct a basic vehicle service, common fault finding, purchasing their first car and basic panel and rust repair. Students will also experience basic automotive maintenance practices and investigate career paths in the automotive industry.
Fees: $\$ 30$ Contact Person: Mr P Craft

| Code: TVG | Girls' Automotive - Core Module 1 | Prerequisites: Nil |
| :--- | :--- | :--- |
| This girls only class will learn integral information about owning and driving a car with a mixture of practical and |  |  |
| theoretical lessons. Students will eventually learn how to complete an oil and filter change and a service that |  |  |
| would normally be costly. Throughout the semester, topics covered will be: Basic car maintenance, basic car |  |  |
| servicing, emergency repairs, how a car works, getting your license, purchasing your own car, legal |  |  |
| requirements, insurance, road rules and safety. |  |  |


| Fees: $\$ 30$ | Contact Person: Mr P Craft |
| :--- | :--- |

## Industrial Technology - Building and Construction

| Code: TB1 | Core 1 - Building Construction | Prerequisite: Nil |
| :--- | :--- | :--- |

In Unit 1 of the Building and Construction course, students will dive into the world of construction by starting with the fundamentals. This will involve learning about WH\&S protocols and regulations, selecting and applying materials correctly, and using a range of tools and machines to create a cement float. Students will also be introduced to the principles of framing joinery techniques, which will help them develop their design and communication skills. By linking all activities to industry standards, students will gain a deep understanding of the building industry and its best practices.
Fees: $\$ 50 \quad$ Contact Person: Mr O Meredith

| Code: TB2 | Core 2-Building Construction | Prerequisite: TB1 |
| :--- | :--- | :--- |
| In Unit 2, students of Building and Construction will continue to expand their knowledge by taking on a new |  |  |
| challenge: fabricating window frames and doors. They will build on their existing knowledge of WH\&S protocols, |  |  |
| material selection and application, and tool and machine use to create these key elements of any building. |  |  |
| Through this project, students will develop their skills in design and communication, and learn how to apply |  |  |
| them in a practical context. As with all activities in this course, industry standards will be emphasized to ensure |  |  |
| students are fully prepared for the workplace. |  |  |

Fees: $\$ 50 \quad$ Contact Person: Mr O Meredith

| Code: TB3 | Unit 3-Outdoor Structures and Landscaping | Prerequisite: TB2 |
| :--- | :--- | :--- |
| Specialised Unit 3 in Building and Construction is all about outdoor construction and landscaping. This unit will <br> challenge students to apply their existing knowledge of WH\&S, material selection and application, and tool and <br> machine use to create outdoor projects such as concrete slabs and garden benches. By working on these <br> projects, students will further develop their skills in design and communication, with a specific focus on outdoor <br> construction and landscaping. As always, industry standards will be emphasized to ensure students are fully <br> equipped to work in this area of the building industry. |  |  |
| Fees: $\$ 50$ | Code: TB4 Unit 4-Outdoor Structures and Landscaping Prerequisite: TB3 <br> In Specialised Unit 4, students of Building and Construction will continue to hone their skills in outdoor <br> construction and landscaping, with a focus on larger and more complex projects. Students will build on their <br> existing knowledge of WH\&S, material selection and application, and tool and machine use to create structures <br> such as picnic tables and concrete slabs. As with all units in this course, design and communication skills will <br> be emphasized to help students create structures that are not only functional, but also aesthetically pleasing.   |  |

Fees: $\$ 50 \quad$ Contact Person: Mr O Meredith

Please note that both the Specialised units in Outdoor Construction and Landscaping can be interchanged with Specialised units in Construction and Renovation where there are no school based projects available at the time.

## Industrial Technology - Engineering

In accordance with the K-10 Curriculum Framework Industrial Technology 7-10 syllabus, the study of Industrial Technology - Engineering takes into account the diverse needs of all students. The Engineering focus area provides opportunities for students to develop knowledge, understanding and skills in relation to the Engineering and associated industries.

The two Core Modules develop knowledge and skills in the use of materials, tools and techniques related to engineering which are enhanced and further developed through the study of subsequent Control systems and Alternative Energy modules.

Students undertaking Industrial Technology - Engineering (100 hours) MUST complete the two Core units TE1 and TE2.

Students undertaking Industrial Technology - Engineering (200 hours) continue with TE3 and TE4.
Students undertaking Industrial Technology - Engineering as an Interest only subject for one semester choose TE1.

| Code: TE1 | Core 1-Engineered Structures | Prerequisite: Nil |
| :--- | :--- | :--- |
| A practical based unit that introduces students to a range of tools, equipment, joining methods and safety |  |  |
| associated with Engineering. Students will also study about the properties, structure and applications of various |  |  |
| materials including hardness, ductility, and compressive strengths. |  |  |
| Students will design and construct a model tower and truss bridge to specifications provided, then subject them |  |  |
| to various tests or load it to destruction. Experience will be gained in designing, constructing and using the |  |  |
| isometric method of drawing including details. Students will also learn to make mechanical calculations of forces |  |  |
| in beams and structures and effects of forces on structures. Equipment will include basic woodworking hand |  |  |
| tools whereas the materials used will be mainly timber and timber related products. |  |  |


| Fees: $\$ 30$ | Contact Person: Mr L Hogan |
| :--- | :--- |


| Code: TE2 | Core 2-Engineered Mechanisms | Prerequisite: TE1 |
| :--- | :--- | :--- |

This unit expands upon Engineered Structures Core Module 1. Students will further develop their knowledge and skills in the use of hand and power tools and equipment. Study of the properties of materials will be further investigated in the toughness, malleability, corrosion, resistance, torsional and shear strengths and heat treatment. Students will design a project which will involve different mechanisms such as levers, pulleys, gears and cams. Other topics studied will be frictional forces, mechanical advantage, velocity ratio and efficiency.
Fees: $\$ 30 \quad$ Contact Person: Mr L Hogan

| Code: TE3 | Unit 3-Control Systems | Prerequisite: TE2 |
| :--- | :--- | :--- |
| This unit builds upon TE1 and TE2. Students will further develop their knowledge by utilising materials, <br> designing and drawing to scale, engineering report writing and model construction of mechanical, pneumatic, |  |  |
| hydraulic and electronic control systems. This module focuses around teamwork and encourages students to |  |  |
| consider the task as an Engineer. Students will also learn about mechanical calculations, forces and the effects |  |  |
| they have on control systems, CAD applications and simulations at an elementary level. |  |  |


| Code: TE4 | Unit 4 - Alternative Energy | Prerequisite: TE3 |
| :--- | :--- | :--- |

This unit builds upon TE1, TE2 and TE3. Students will further investigate engineering materials, principles and processes. Major topics studied will include composite materials, alternative energy sources such as solar, wind, wave, human and thermal. The topic of electricity will be studied in depth. Students major project will include the investigation of an alternative energy source accompanied by an engineering report which will be computer generated using a range of computer software applications.
Fees: \$30
Contact Person: Mr L Hogan

## Industrial Technology - Electronics

Students undertaking Industrial Technology - Electronics (100 hours) MUST complete the two Core units TL1 and TL2.
Students undertaking Industrial Technology - Electronics (100 hours) continue with TL3 and TL4.
Students undertaking Industrial Technology - Electronics as an Interest only subject for one semester choose TL1.

Students follow a prescriptive experiment-based introduction and development program in semesters one and two. In the third semester, students are able to direct their learning towards a specific topic in the general area of electronics. In the fourth semester students are able to specialise in one of three topic areas. The study of electronics should give students a sound theoretical and practical knowledge of electronics and electronic systems and allow for future progression into the senior school or trade study. Students who choose to study Electronics must complete two modules for a 100 hour course or four modules for a 200 hour course. The semester units must be studied in sequence.

| Code: TL1 | Core 1 - Electronics 1 | Prerequisite: Nil |
| :--- | :--- | :--- |
| The study of the use and function of basic electronics components such as Resistors, Diodes, Capacitors and |  |  |
| Transistors. Experiments involve production of simple circuits, relevant calculations, report writing, product |  |  |
| evaluation and use of testing equipment to troubleshoot and solve problems. Constructed projects include |  |  |
| Continuity Testers, Amplifiers and Decision Makers. |  |  |

Fees: \$40
Contact Person: Mr E Kennedy

## Code: TL2 $\quad$ Core 2-Electronics $2 \quad$ Prerequisite: TL1

Further study into the function of electrical systems including Timers and Counters. Experiments involve production of circuits, relevant calculations, report writing, product evaluation and use of testing equipment to troubleshoot and problem solve. Circuits are created with a variety of methods, including through use of emerging technology. Students will use Computer Aided Design and Manufacturing equipment to produce circuits including Light Detectors, Electronic Dice and Coin Simulators.
Fees: $\$ 50$ Contact Person: Mr E Kennedy

| Code: TL3 | Unit 3-Electronics - Specialised | Prerequisite: TL2 |
| :--- | :--- | :--- |

In Specialised Electronics, students learn about Digital Electronics, including Binary Logic, Logic Gates and Specialised Integrated Circuits. Knowledge developed in Core 1 and Core 2 provides a basis for the development of more complicate circuits. Computer Simulation is used to design and test complex digital circuits. Computer Aided Design and Manufacturing equipment is used in PCB production. Students will use EasyEDA, ExpressPCB, Roland CutStudio and a variety of Adobe programs to produce circuits and enclosures.

| Code: TL4 | Unit 4-Electronics - Specialised | Prerequisite: TL3 |
| :--- | :--- | :--- |
| Advanced Digital Electronic systems. Computer simulation and Computer Aided Design and Manufacturing are |  |  |
| used to develop a range of projects, culminating in the development of an Arduino based Student Negotiated |  |  |
| Project, conducted in a similar way to an HSC Major Project. Students can use all the equipment and |  |  |
| components used in prior units, and will work to design their own circuit, simulate it using appropriate software, |  |  |
| prototype their design, and build a quality final product. |  |  |

[^0]
## Industrial Technology - Metal

In accordance with the K-10 Curriculum Framework Industrial Technology 7-10 syllabus, the study of Metal takes into account the diverse needs of all students. The metal focus area provides opportunities for students to develop knowledge, understanding and skills in relation to Metal and associated industries.

The Core unit develops knowledge and skills in the use of materials, tools and techniques related to metal which are enhanced and further developed through the study of subsequent specialised units.
Students undertaking Industrial Technology - METAL (100 hours) MUST complete the Core unit TQ1 and TQ2 Students undertaking Industrial Technology - METAL (200 hours) METAL continue with TQ3 and TQ4.
Students undertaking Industrial Technology - METAL as an Interest only subject for one semester choose TM1.

Assessment is largely based on the student's ability to carry out Workplace, Health and Safety procedures when in the workshop environment, their ability to produce quality practical projects and complete related theory and design portfolio work.

100 Hour

| Code: TQ1 | 100 Hours General Metal - Core 1 Part A | Prerequisites: Nil |
| :--- | :--- | :--- |
| The Metal 1 core module develops knowledge and skills in the use of tools, materials and techniques related to |  |  |
| general metalwork. These are enhanced and further developed through the study of specialist modules in Metal |  |  |
| Machining and Fabrication. Students will identify and investigate factors influencing design in metal including |  |  |
| finishing, material selection, processes and material properties. They will use a range of tools, equipment, |  |  |
| shaping and joining techniques and learn about the safety associated with Metal Machining and Fabrication. |  |  |
| Students will complete a variety of practical projects using hand and machine tools and will develop a basic |  |  |
| knowledge of how to read and interpret engineering drawings associated with design, layout and planning of |  |  |
| fabrication and machining projects. Experience will be gained in metal cutting, threading, basic lathe operations |  |  |
| and finishing. Equipment could include, the lathe, drill press and pan brake sheet metal folder in addition to a |  |  |
| range of hand and power tools. |  |  |

Fees: $\$ 40 \quad$ Contact Person: Mr T Winkcup

| Code: TQ2 | 100 Hours General Metal - Core 1 Part B | Prerequisites: TQ1 |
| :--- | :--- | :--- |

The Metal 1 core module develops knowledge and skills in the use of tools, materials and techniques related to general metalwork. These are enhanced and further developed through the study of specialist modules in Metal Machining and Fabrication. Students will identify and investigate factors influencing design in metal including finishing, material selection, processes and material properties. They will use a range of tools, equipment, shaping and joining techniques and learn about the safety associated with Metal Machining and Fabrication. Students will complete a variety of practical projects using hand and machine tools and will develop a basic knowledge of how to read and interpret engineering drawings associated with design, layout and planning of fabrication and machining projects. Experience will be gained in metal cutting, threading, basic lathe operations and finishing. Equipment could include, the lathe, drill press and pan brake sheet metal folder in addition to a range of hand and power tools.

| Fees: $\$ 40$ | Contact Person: Mr T Winkcup |
| :--- | :--- |

## 200 Hour

| Code: TQ3 | 50 Hours Specialised Module - Machining 2 | Prerequisites: TQ2 |
| :--- | :--- | :--- |

This unit expands upon General Metal - Core 1. Students will further develop their knowledge and skills in the use of tools and equipment commonly used for fitting and machining in the production of practical projects. Practical experience will be gained in a variety of lathe and milling techniques. Students will be introduced to Fuel Gas (Oxy) and Gas Manual Metal Arc Welding (MIG) in conjunction with experience in hot and cold forming techniques, use of power cutting saws and thread cutting.

Contact Person: Mr T Winkcup

Code: TQ4 $\quad \mathbf{5 0}$ Hours Specialised Module - Fabrication 2
Prerequisites: TQ3
This unit builds upon TM1 and TM2. Students will learn further skills, processes and techniques including use of bending, rolling and forming equipment, magnetic sheet bender and use of jigs to produce repetitive and accurate components. Students will use their skills to design and present a major project and information portfolio that demonstrates and expands their knowledge of Fitting and Machining, and Metal Fabrication. Students will be required to present planning and layout drawings for projects utilising engineering standards. Simple CAD techniques will be required to produce full or partial working drawings.
Fees: \$40
Contact Person: Mr T Winkcup

## Industrial Technology - Multimedia

In accordance with the K-10 Curriculum Framework Industrial Technology 7-10 syllabus, the study of Industrial Technology - Multimedia takes into account the diverse needs of all students. The multimedia focus area provides opportunities for students to develop knowledge, understanding and skills in relation to the multimedia and associated industries.

The two Core Units develop knowledge and skills in the use of materials, tools and techniques related to multimedia which are enhanced and further developed through the study of subsequent specialised modules.

Students undertaking Industrial Technology - Multimedia (100 hours) MUST complete the two Core units TM1 and TM2.
Students undertaking Industrial Technology - Multimedia (200 hours) Multimedia continue with TM3 and TM4. Students undertaking Industrial Technology - Multimedia as an Interest only subject for one semester choose TM1.

| Code: TM1 | Core 1-Multimedia 1 | Prerequisites: Nil |
| :--- | :--- | :--- |

Inspired by films such as Chicken Run and The Lego Movie, students learn about basic animation techniques combined with movie editing software. By the conclusion of this core unit students will create a set and produce a short linear stopmotion animation. Students will also be involved in creating a short film, including recording and editing footage. Hardware used in this course includes digital cameras, tripods and lighting equipment. Software used includes Adobe Photoshop, Adobe Premiere Pro and Adobe Audition.
Fees: \$20
Contact Person: Mrs E Sarna

| Code: TM2 | Core 2 - Multimedia 2 | Prerequisites: TM1 |
| :--- | :--- | :--- |

This unit aims to open students' minds to 3 dimensional modelling and animation. Using modelling packages such as 3D Studio Max or Blender, students will design a 3D environment that displays graphics or textures which they have created in Adobe Photoshop. Once the room is assembled and textured, students will create an interactive digital walk through animation of the room using Adobe Flash.

| Fees: \$20 |  | Contact Person: Mrs E Sarna |
| :---: | :---: | :---: |
| Code: TM3 | Unit 3 - Multimedia 3 | Prerequisites: TM2 |
| In this unit students will be involved in creating their own special effects masterpiece. They will work through the design process to take their idea from concept to realisation. Using hardware such as video cameras, tripods, lighting equipment and high powered desktop computers, students will capture and edit their own footage. Software used includes Adobe Premiere and Adobe After Effects. |  |  |

Fees: \$20
Contact Person: Mrs E Sarna

| Code: TM4 | Unit 4-Multimedia 4 | Prerequisites: TM3 |
| :--- | :--- | :--- |

This unit directly flows on from Multimedia 3. Students will further develop their skills in a variety of programs through the creation of a special effects feature movie to enter in a film festival such as Tropfest. They may instead choose to create an animated movie to enter in similar competitions. The project will combine skills developed in all previous Multimedia units.
Fees: $\$ 20 \quad$ Contact Person: Mrs E Sarna
In each of the units students will work in groups of 1 or 2 and will produce a completed project that is complemented with a matching management, research and design portfolio. This is then presented to the class by the individual or group at the end of each term.

Both portfolio and presentation are marked as the assessment.

## Industrial Technology - Timber

In accordance with the K-10 Curriculum Framework Industrial Technology 7-10 syllabus, the study of Industrial Technology - Timber takes into account the diverse needs of all students.

The timber focus area provides opportunities for students to develop knowledge, understanding and skills in relation to the Timber and associated industries.

The two Core Units develop knowledge and skills in the use of materials, tools and techniques related to timber which are enhanced and further developed through the study of subsequent specialised modules.

Students undertaking Industrial Technology - TIMBER (100 hours) MUST complete the two Core units TW1 and TW2.
Students undertaking Industrial Technology - TIMBER (200 hours) TIMBER continue with TW3 and TW4. Students undertaking Industrial Technology - TIMBER as an Interest only subject for one semester choose TW1.

| Code: TW1 | General Wood - Core 1 | Prerequisite: Nil |
| :--- | :--- | :--- |
| This course is designed to develop practical skills in wood joinery processes and safe use of hand and power |  |  |
| tools, as well as their understanding of traditional furniture construction techniques. Throughout the course, |  |  |
| students will learn about design processes, material functionality, and techniques for enhancing project |  |  |
| appearance. Emphasis is placed on working safely in a workshop environment, as well as Workplace |  |  |
| Communication Skills and Societal and Environmental Impact Issues. The outcomes of this course will be |  |  |
| demonstrated through the construction of individual projects and folio, with a focus on ensuring the safety of all |  |  |
| students through proper WHS practices and risk assessment. |  |  |

Fees: $\$ 60$ includes all materials used $\quad$ Contact Person: Mr O Meredith

| Code: TW2 | General Wood - Core 2 | Prerequisite: TW1 |
| :--- | :--- | :--- |
| This course is designed to build upon the foundational knowledge and skills gained in Core unit 1, with a focus |  |  |
| on deepening students' understanding of Industrial Technology Timber before progressing into Specialised units |  |  |
| 3 and 4. Through a combination of theoretical and practical instruction, students will learn to use a wider range |  |  |
| of power and machine tools for sanding, routing, turning, and joinery. Emphasis is placed on honing students' |  |  |
| ability to think critically, problem-solve, and use design processes to develop and execute complex projects. |  |  |
| The outcomes of this course will be demonstrated through the construction of individual projects and folio. Safe |  |  |
| work practices, including the proper use of power and machine tools, will be reinforced throughout the course, |  |  |
| building on the foundation established in Core unit 1. |  |  |

Fees: \$60 includes all materials used $\quad$ Contact Person: Mr O Meredith

| Code: TW3 | Cabinetwork - Specialised Unit 3 | Prerequisite: TW2 |
| :--- | :--- | :--- |
| Building on the skills and knowledge gained in the previous courses, this next course takes a step back from |  |  |
| machine processes and instead focuses on traditional hand-cut joinery techniques. The course will also cover |  |  |
| more advanced. Through a range of individual projects, students will demonstrate their mastery of hand-cut |  |  |
| joinery techniques and other relevant skills including turning between centres. Safe work practices will continue |  |  |
| to be emphasized, including the proper use of hand tools and other equipment. By the end of the course, |  |  |
| students will have a deeper understanding of cabinetwork and traditional joinery techniques and be well- |  |  |
| equipped to pursue further studies in this field. |  |  |

Fees: $\$ 75$ includes all materials used
Contact Person: Mr O Meredith

| Code: TW4 | Cabinetwork - Specialised Unit 4 | Prerequisite: TW3 |
| :--- | :--- | :--- |

This final course in the series allows students to showcase the skills and knowledge they've gained in previous courses through a student-directed project. Students will design and build a project of their choice, applying design principles and techniques learned in previous courses. They will plan and execute the project using a combination of hand and power tools and reflect on their learning through a project folio. Safe work practices will continue to be emphasised.

Fees: $\$ 75$ includes all materials used
Contact Person: Mr O Meredith

## COMPUTING

## Computing Technology (new course in 2024)

Studying Computing Technology enables students to develop skills in the specific application of computing technologies and to develop digital solutions applicable to a range of industrial, commercial and recreational contexts. Computing Technology focuses on computational, design and systems thinking. It also develops data analysis and programming (coding) skills. The knowledge and skills developed in the course enable students to contribute to an increasingly technology-focused world. There are 6 available units in two groups. Students need to choose a balance of units from each of the groups to meet the NESA requirements. Each unit is 1 semester and 50 hours.

| Code | Focus Area / Unit | Group |
| :--- | :--- | :--- |
| 9CTN | Modelling networks and Social Connections | Enterprise information systems |

Students will delve into current social networking trends and develop an understanding of social media influencers and the social, ethical and legal requirements they must adhere to while maintaining audience. This unit will support students as they identify and plan for a safe and secure network for all key stakeholders involved (scenario based). Vulnerabilities will be identified, and potential solutions tested and evaluated for success. Teachers will evaluate project solutions based on data analysis, security and efficient network design

\section*{| 9CTX | Designing for the User Experience | Enterprise information systems |
| :--- | :--- | :--- |}

Students develop their knowledge and skills in the use of a variety of tools, materials and techniques related to multimedia production, user interfaces and the user experience. This unit supports students as they develop projects that use interactivity and work with user data to produce working solutions to problems. Design qualities are emphasised to ensure functionality, accessibility, usability and aesthetics while adhering to privacy and copyright requirements including legal and ethical responsibilities.

| 9CTD | Analysing Data | Enterprise information systems |
| :--- | :--- | :--- |

Students develop their knowledge and skills in collecting, analysing and displaying results of analysis using a range of tools and software. This unit supports students as they create storage mechanisms and databases that facilitate data analysis, use data analysis to make evaluations and decisions on the data and create reports and data dashboards that are relevant for a range of stakeholders. Students will also be required to evaluate their projects and other case studies in terms of the validity of data analysis and the use of personally identifying information.

| 9CTM | Building Mechatronics and Automated Systems | Software Development |
| :--- | :--- | :--- |

Students develop their knowledge and skills in the use of a variety of microcontrollers and coding options to develop a simple device to support the physical, emotional, social or cognitive wellbeing of a user. This unit supports students as they develop, plan, design and construct a mechatronic system, using algorithms and/or automated systems to solve a real-world problem Students will evaluate their own project, ensuring functionality, code validation and data security.

Fees: \$50

## 9CTG $\quad$ Creating Games and Simulations $\quad$ Software Development

Students will delve into the world of computer games and gaming to discover how society has influenced the development of games and simulations. This unit supports students as they follow and evaluate a range of case studies to consider the social impacts of games and how they can be developed. The students will plan and document for new games including using algorithm design methodologies and develop a range of game and simulation projects to demonstrate their understanding.

| 9CTA | Developing Apps and Web Software | Software Development |
| :--- | :--- | :--- |

Students will explore the purposes and uses of apps and web software in a range of contexts to see how the changing needs of society are being met online. This units supports student development of programming skills and knowledge in developing apps from defined needs and requirements using a range of tools and software. Projects will include the planning for and production of working apps using algorithms and software tools in an object-oriented paradigm.

## SCHOOL BASED COURSES

School-based courses are interest subjects that are approved for teaching but are unique to CTHS, intended to broaden genuine academic interest and promote the development of skills and abilities, students can add these to their selection. Two units over the two years are available beyond the NESA and School requirements.

## English Elective Course

English uses an integrated approach to the development of skills. Speaking, Listening, Reading and Writing skills are developed through the study of literature and language, through the use of performance and investigation of the mass media and different technologies.

It is especially important for students in Year 9 to realise that their work is an important stepping stone for the transition to senior English that a year of committed work in Year 9 will prepare students well for the demands of Year 10. Several Elective courses are being offered to allow students to expand their experiences in English.

| Code: EWR | Writers and Writing | Prerequisites: Nil |
| :--- | :--- | :--- |
| This unit focuses on the creative writing process. Students will firstly research and examine the writings of a |  |  |
| number of famous writers. They will have a brief overview of the development of language and literature through |  |  |
| the ages. The second half of the course involves the students in creating their own significant piece of writing. |  |  |
| They will be required to draft, edit, polish and reflect upon their own piece of work, and their work may be in one |  |  |
| of a number of forms, including narrative, script, digital narrative, poetry or multi media. This major work |  |  |
| constitutes the main part of the assessment for this course. This course in suitable for students who enjoy |  |  |
| reading and/or creative writing. |  |  |

Fees: Nil
Contact Person: Mr S Henry

| Code: ESP | English Speakers | Prerequisites: Nil |
| :--- | :--- | :--- |
| This unit focuses on the skill of public speaking. Students will listen to and study various famous speeches, |  |  |
| considering the various elements of that speech which make it significant. This is also a very practical course |  |  |
| and students will be required to attempt a range of tasks including impromptu and prepared speeches, debates, |  |  |
| panel discussions and interviews. They will also learn about preparation and speech writing for different |  |  |
| audiences, voice techniques, persuasive language and the power of oratory. This would be a valuable course |  |  |
| for students who would like to develop their public speaking skills or enhance their analytical skills. |  |  |

Contact Person: Mr S Henry

| Code: EPO | Poe-k your Imagination | Prerequisites: Nil |
| :--- | :--- | :--- |

Study Edgar Allan Poe (1809-1849) American author, poet and critic. Known for his tales of mystery and the macabre, inventor of detective fiction and forerunner to the emerging genre of sci-fi, this course examines the writing of the father of the short story. Learn about the Romantic and Gothic genres in which he writes. Titillate your imagination as you analyse his stories and come to an understanding of what makes a great piece of writing. Refine your skills creating your own wicked tale. This is a great course for those who love English or who want to focus on improving their writing skills. It will help to prepare you for your senior studies in English particularly Extension 1 and 2.
Fees: Nil $\quad$ Contact Person: Mr S Henry

## Mathematics Elective

| Code: MMA | Exploring Mathematics | Prerequisites: Nil |
| :--- | :--- | :--- |

This course is designed for Stage 5 students who are seeking to go beyond the textbook to explore different areas of Mathematics that they would not otherwise encounter or experience at high school. The aim of this course is to encourage deep thinking and understanding while developing Mathematical thought and problem solving skills. The course will assist students in seeing and appreciating the Mathematics that we encounter in the world around us. Students will be assessed through a series of practical tasks, assignments and presentations. Students undertaking this course are expected to be able to work independently and be interested in wrestling with complex and abstract concepts. This is not an accelerated course and will not cover content taught in the other Stage 5 or 6 Mathematics courses.
Fees: Nil
Contact Person: Mrs J Bowen

## English as a Second Language

Year 9 and 10 students, who have a non-English speaking background, may benefit from intensive English tuition. Eligible students will be invited to join these courses, which students can follow for either 1 or 2 years. They will be placed in the course appropriate to their English competency level. These courses supplement other support provided to students by the ESL teachers across the curriculum.

| Code LE3 (Semester 1) | ESL 1 | Prerequisite: Diagnostic Assessment |
| :--- | :--- | :--- |
| This unit is designed to support the language and literacy needs of ESL students in Stage 5. Students will work |  |  |
| with a range of texts in support of their learning needs in all subjects and gain opportunities to develop their |  |  |
| skills in listening, speaking, reading and writing. |  |  |

Fees: Nil $\quad$ Contact Person: Mrs M Arkins

| Code LE4 (Semester 2) | ESL 2 | Prerequisite: Diagnostic Assessment |
| :--- | :--- | :--- |
| For students who need to study this course for a second semester. Students will continue with an individualised <br> program of English development, with a major focus on reading and writing skills in all subjects and gain <br> opportunities to develop their skills in listening, speaking, reading and writing. |  |  |


| Fees: Nil |  | Contact Person: Mrs M Arkins |
| :---: | :---: | :---: |
| Code LE5 (Semester 1) | Academic English 1 | Prerequisite: Diagnostic Assessment |

Fees: Nil $\quad$ Contact Person: Mrs M Arkins
Code LE6 (Semester 2) $\quad$ Academic English $2 \mathrm{Prerequisite:} \mathrm{Diagnostic} \mathrm{Assessment}$

This unit prepares students for the demands of using Academic English, using more sophisticated levels of language in preparation for the English language demands of senior high school
Fees: Nil $\quad$ Contact Person: Mrs M Arkins

## Stepping Stones to Senior School

| Code: SSA | Stepping Stones to Senior School 1 | Prerequisite: Nil |
| :--- | :--- | :--- |

Stepping Stones to Senior School is a program designed to prepare Year 9 and 10 students for the academic demands of Year 11 and 12, as well as providing support for NAPLAN, Minimum Standards Tests and ongoing coursework from core subjects.

The course provides students with a variety of literacy and organisational skills which are selected to provide students with the best chance of success in their HSC and further education. Students study a variety of textual forms and study skills which allow them to improve their comprehension, understanding of literary techniques, essay and creative writing, and exam preparation.

Components of the program include:

- Reading for Meaning - Predict, Monitor, Review reading style
- Digital organisation techniques using One Drive and Google Drive
- Functional grammar and writing skills
- Essay writing - Persuasive and Discursive essays
- Creative writing and the Short Story form
- Study methods and Exam techniques
- Opportunities for support on core subject homework tasks and assessment preparation

> | Fees: Nil | Contact Person: Mr P Hind |
| :--- | :--- |

## Code: SSB $\quad$ Stepping Stones to Senior School $2 \quad$ Prerequisite: Nil

Stepping Stones to Senior School is a program designed to prepare Year 9 and 10 students for the academic demands of Year 11 and 12, as well as providing support for NAPLAN, Minimum Standards Tests and ongoing coursework from core subjects.

The course provides students with a variety of literacy and organisational skills which are selected to provide students with the best chance of success in their HSC and further education. Students study a variety of textual forms and study skills which allow them to improve their comprehension, understanding of literary techniques, essay and creative writing, and exam preparation.

Components of the program include:

- Reading for Meaning - Predict, Monitor, Review reading style
- Digital organisation techniques using One Drive and Google Drive
- Functional grammar and writing skills
- Essay writing - Persuasive and Discursive essays
- Creative writing and the Short Story form
- Study methods and Exam techniques
- Opportunities for support on core subject homework tasks and assessment preparation
Fees: Nil $\quad$ Contact Person: Mr P Hind


## Stage 5 Christian Studies (Christian SRE)

At CTHS, Christian Studies (Christian SRE) is provided by the Pennant Hills and Cherrybrook Christian Education Association (PH\&CCEA) on behalf of the local Christian churches. This subject is not a CTHS school-based subject, nor is it a NSW Education Standards Authority (NESA) subject.

\section*{| Code: XST | Christian Studies - Christian SRE | Prerequisite: Nil |
| :--- | :--- | :--- |}

Christian Studies (Christian SRE) is a non-compulsory timetabled subject in Year 10, once a fortnight, for one semester. (Parents may withdraw their child from the subject at any time by emailing the Stage 5 Head Teacher).

In Christian Studies students will study the book of Luke, looking closely at the historical life of Jesus and exploring the claims made about him. Throughout the semester students will consider the following questions:

- What was Jesus trying to achieve through his mission on earth?
- Does Jesus' mission and ministry have any relevance today?
- Why do the Gospels focus so much on Jesus' death?
- How does Luke see Jesus as special?

Fees: $\$ 10$
Contact Person: Mr M Eastman

## Careers (Vocational Education)

## Code: VOC Careers

## Prerequisite: Nil

Vocational Education is a compulsory timetabled subject in Year 10 and runs for one semester. This course seeks to equip students with skills and knowledge they will need as they make decisions about their careers and life paths. Throughout the semester students will work through the following modules:

- All About Me - Students identify their interests, strengths, personal characteristics and life aims
- Career Exploration - Students research the education and training requirements of the occupations which are suitable to them
- Post-School Options - Students make informed decisions about what career path to take and what postschool options are available to them
- Preparing for Future Employment - helps students with essential job-seeking skills such as resume writing, cover letter writing, and interview techniques.

All students are encouraged to undertake at least one week of work experience to explore the world of work and their career interests.

Students participate in the Morrisby Careers Assessment and attend a Careers Expo at an additional cost.
Fees: $\$ 15$ for Portfolio folder \& career resources Contact Person: Mrs F Arroyo

## SUBJECT SELECTION CHOICES

| Choice | Electives Picked |
| :---: | :---: |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |


| Choice | Electives Picked |
| :---: | :---: |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |

You can use the above tables to draft possible choices and as a record of what you have entered.

STAGE 5 PLAN (YEARS 9 AND 10)

| Elective Courses | Semester 1 <br> Year 9 | Semester 2 <br> Year 9 | Semester 1 <br> Year 10 | Semester 2 <br> Year 10 | 100 <br> or <br> 200 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Eg <br> Commerce | 9HCA20 <br>  <br> Earning | 9HCF20 <br>  <br> Investing | 9HCE20 <br> Law in Action | MHCB20 <br> Markes \& the Legal <br> System | 200 Hour elective |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |


[^0]:    Fees: \$60
    Contact Person: Mr E Kennedy

