TURRAMURRA HIGH SCHOOL

YEAR 9 & YOU 2021

Subject Selection Information Booklet



CONTENTS

	Page
Introduction to Electives for Years 9 & 10	
Stage 5 Curriculum Requirements for Years 9 and 10	2
Satisfying Course Requirements for the Stage 5	2
The Record of School Achievement (RoSA)	2
Making Course Choices	2
Extra Costs Associated with Some Courses	3
Board Developed Courses and Content Endorsed Courses	3
Table of Elective Courses Offered	4
Creative and Performing Arts	
Dance	6
Drama	6
Music	7
Visual Arts	8
Visual Design	9
Human Society and its Environment	
Commerce	11
Geography Elective	11
History Elective	12
Languages Other Than English	
Chinese	14
Japanese	14
Italian	
Personal Development/Health/Physical Education	
Physical Activity & Sport Studies (P.A.S.S.)	16
Technological and Applied Studies	
Food Technology	19
Graphics Technology	20
Industrial Technology – Metal (Jewellery)	21
Industrial Technology – Timber	22
Information & Software Technology	23
Industrial Technology – Engineering (istEm)	24-25
Textiles and Design	26

Introduction

Electives for Years 9 for 2021

Stage 5 Curriculum Requirements for Years 9 and 10

When presenting for Stage 5 at Turramurra High School a student's course pattern will be structured to follow the NESA requirements as follows.

All students must study:

- English
- Mathematics
- Science
- Australian History and Geography, Civics and Citizenship
- Personal Development/Health and Physical Education
- Sport
- Careers

plus

- Two 200-hour elective courses studied over Years 9 and 10
- One Course that extends on the My Learning Journey Program from Year 7 and 8 which includes project based learning modules studied in Year 9 only.
- One 100-hour elective course studied in Year 10 only

Satisfying Course Requirements for Stage 5

To qualify for the award of a grade in a subject, a candidate must have a satisfactory record of attendance and application. The Principal will be required to certify this to NESA.

Grades A–E will be awarded in all courses including English, Mathematics, Science, Australian History, Civics and Citizenship, Australian Geography, Civics and Citizenship, and the elective subjects studied, based on school-based assessment of a student's achievement with reference to performance descriptors issued by the Board of Studies. *An* 'N' *determination will be given for courses which have not been satisfactorily completed.*

The Record of School Achievement (RoSA)

Eligible students **who leave school** before receiving their Higher School Certificate (HSC) will receive the NSW Record of School Achievement (RoSA). The RoSA is a **cumulative credential** in that it allows students to accumulate their academic results until they leave school.

The RoSA records **completed Stage 5** and Preliminary Stage 6 courses and grades, and participation in any uncompleted Preliminary Stage 6 courses. It is of specific use to students leaving school prior to the HSC.

Making Course Choices

Students entering Years 9 and 10 at Turramurra High School have the opportunity to choose from a wide range of elective courses. Students will study two 200 hour elective courses through Years 9 and 10, and one 100 hour elective in Year 9 only.

All elective courses described in this booklet are initially offered as 200 hour courses. The 100 hour courses are reduced forms of the 200 hour courses.

The *Subject Selection Form* indicates that students choose 200 hour courses only. The school will determine which courses are 200 hour and 100 hour, based on the pattern of choices made by students.

In choosing courses, please keep in mind the following:

- Elective History, and Elective Geography courses may be chosen *in addition to* the compulsory Australian History, Civics and Citizenship, and Australian Geography, Civics and Citizenship courses.
- The course choice should take into account the student's experience in that course or related fields in Year 8. A course which has proven to be unduly difficult in Year 8, is likely to remain so in Years 9 and 10.

When choosing elective courses for Year 9 and 10, students should ask themselves *five* questions:

- 1. Which courses do I *enjoy* most?
- 2. Which courses do I *do well in*?
- 3. Which courses *interest* me?
- 4. Which courses may equip me for a **future career**?
- 5. Have I chosen too many courses with **subject specific costs**?

When Subject Selection Forms are returned, an assessment is made of the possibilities of forming classes to meet the pattern of choices made by students. This is done in the light of the staffing resources available to the school. If a course draws little response then some students may be asked to reconsider their choices. It may be that when the elective lines are finalised some students may find two courses that they wanted to study, clash in the timetable lines. Students are allocated to courses based on their preference order.

Please note that the listing of a course on the *Subject Selection Form* cannot be taken to imply that a class or classes will always be formed.

Extra Costs Associated With Some Courses

Some courses require the purchase of special equipment and materials over and above what is provided through the general budget of the school. These **extra costs are met by the students** choosing these courses and are outlined in the course descriptions. This payment also allows students greater freedom in choosing a range of materials and project sizes in the course of their class work.

This levy is not a voluntary contribution. This cost is an elective levy to meet the cost of consumables and must be paid to enable the successful running of the course for all students. It is not the intent of the school to limit the breath of curriculum for any student. Where the payment of an elective subject levy may be an issue, families should speak directly to the Principal to discuss their options.

Board Developed Courses and Content Endorsed Courses

The majority of courses offered by schools in New South Wales are developed by NESA. These courses are known as **Board Developed Courses**.

Individual schools also have the opportunity to develop their own elective courses to take advantages of local opportunities and to meet the special needs of their students. These courses must pass a rigorous inspection by NESA to ensure their adherence to strict educational standards. These courses are known as **School Developed Courses**.

From time to time there will be a proliferation of school-developed elective courses in a common area of study. NESA will then apply its resources to provide a reliable framework for schools to ensure consistent curriculum standards. These courses are known as Board-developed **Content Endorsed Course**. For example, NESA agreed to the development of a Content Endorsed Course for Stage 5 in the area of Physical Activity and Sports Studies. This course was identified for development following the large number of applications from schools in recent years requesting Board endorsement for a range of School Developed Courses in areas relating to Physical Education.

There is no difference between Board Developed Courses and Content Endorsed Courses as far as assessment and accreditation for the RoSA. All elective courses have the same weighting.

At Turramurra High School all courses are Board Developed Courses, except Physical Activity and Sports Studies which is a Content Endorsed Course.

Changing Courses

It is important that decisions regarding elective courses are made very carefully as they are generally binding from the start of Year 9. *Occasionally a change may be possible early in Year 9 but generally students are committed to courses until the course is completed.*

Table of Courses — Years 9 and 10

Compulsory Core Subjects

Australian History, Civics and Citizenship
Australian Geography, Civics and Citizenship
English
Mathematics

Personal Development, Health and Physical Education Science

Elective Subjects listed by Key Learning Area (KLA)						
Creative and Performing Arts	Human Society and its Environment	Languages other than English	Personal Development, Health and Physical Education	Technological and Applied Studies		
Dance Drama Music Visual Arts Visual Design	Commerce Geography Elective History Elective	Chinese Japanese Italian	Physical Activity and Sport Studies (PASS)	Food Technology Graphics Technology Industrial Technology – Engineering (istEm) Industrial Technology – Metal (Jewellery) Industrial Technology – Timber Information and Software Technology Textiles Technology		

CREATIVE AND PERFORMING ARTS

Dance

Drama

Music

Visual Arts

Visual Design

DANCE

Creative and Performing Arts Faculty

Approximate Cost: \$25.00



The aim of the dance syllabus is for students to experience, understand, value and enjoy dance as an art-form through the interrelated study of the performance, composition and appreciation components of dance.

Students will develop knowledge, understanding and skills about dance as an art-form through:

- **1. Dance performance** as a means of developing dance technique and performance quality to communicate ideas.
- **2. Dance composition** as a means of creating and structuring movement to express and communicate ideas
- **3. Dance appreciation** as a means of describing and analysing dance as an expression of ideas within a social, cultural or historical context.
- 4. **Dance technology** as a means of enhancing dance performance and compositions by developing music editing skills.

Students will have great performance opportunities and will be able to continue Dance to the Higher School Certificate level.



Approximate Cost: \$25.00

DRAMA

Creative and Performing Arts Faculty

Drama is not acting. It is a subject that develops your mind, your confidence and your sense of self. What

we learn is less important than how we learn. We learn through collaboration, critical reflection, creativity and communication. We embrace the most cutting edge, engaging and innovative ways to learn.

This subject is fun, it is challenging and it is unique. In Drama students are asked to make, perform and



appreciate a variety of dramatic forms. Units of work include topics like, mask, movement, melodrama, scriptwriting and playbuilding.

Regardless of the topic, students will learn to think for themselves about ideas that matter. Students will learn to create for themselves in response to ideas that matter. Students will learn to build their resilience and their grit so that they may be part of an experience that matters.

Taken as a whole, Drama is a journey of intelligence that will embolden you as a learner and as a person.

MUSIC

Creative and Performing Arts Faculty

Approximate Cost: \$25.00

The elective course in music is covered in four periods per week. It is the prerequisite for the Music 2 and Music Extension courses in the HSC. Elective music consists of four major areas of study: Performance, Composition, Listening and Aural Skills.

Performance

Music performance involves both group and individual work and usually takes one double period per fortnight. The general aims of this section of the course are:

- to encourage students to develop the skills necessary to satisfy their own musical needs, and
- to give students the confidence to work with sound as a means of personal response.

Composition

Students develop an understanding of basic compositional techniques in a number of different styles. Emphasis will be on both vocal and instrumental styles.

Listening

This is invaluable as an aid to students' own involvement in the same creative problems confronted by musicians through the ages. Studying and listening to different musical scores and recordings also develops students' abilities to be an appreciative and discerning audience in society and also reinforces practical concepts such as the reading and writing of music.



Aural Skills

The development of aural capabilities is a strand which runs through all other sections of the course and is vitally important to the student's musical development.

This course is of particular benefit to those students whose aim is to become a musician, for example, those students who have commenced tuition in the school's band program, string ensemble or choir. It is also helpful with a future career as a pre-school, infants or primary school teacher or for those who find enjoyment in music-making in their leisure time.

Music students are advised to participate in at least one of the school's performing ensembles.

VISUAL ARTS

Creative and Performing Arts Faculty

Approximate Cost: \$60.00

Visual Arts is the process of making and interpreting artworks and images. This course enables students to learn to communicate visually through the making of artworks. They will also be able to communicate about images and objects through the study of related artists and their work.

Students are encouraged to explore their personal vision, insight and creativity through an imaginative and exploratory approach to learning about themselves and their environment through art-making.

The processes and experiences are recorded in each student's Visual Arts Diary. In this book, students record the developments of their ideas, experiments and understanding.

Making images and objects and the critical and historical study of images and objects are strands of the course designed to relate to and complement each other.

Creative learning experiences will encourage creative thinking and stimulate the imagination and expression of students. Various processes will enable them to explore the possibilities of a wide variety of techniques and media in their own art-making. Students will make and study a broad range of artworks from such areas as:

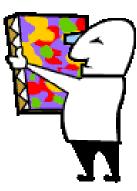
- drawing
- painting
- printmaking
- sculpture
- ceramics
- digital photography, and
- computer manipulated imagery.

The Elective Visual Arts course is an introduction to media, technique and theory which provides a sound preparation for students who choose to pursue a career in such creative design fields as:

- graphic design
- interior design
- fashion design
- film and television
- museum curatorship
- theatre design
- photography.

This course complements but does not overlap or duplicate the Visual Design course. Students with an interest in design/advertising may *also* study Visual Design.

This course also provides an excellent foundation for students who wish to elect Visual Arts and / or Visual Design in Years 11 and 12.



VISUAL DESIGN

Creative and Performing Arts Faculty

Approximate Cost: \$60.00

visual Design is a one or two-year introduction to symbol and logo design, lettering, typography, illustration and the design process used in the advertising and design industries. A series of practical projects focus on various two-dimensional and three-dimensional design tasks such as:

- logo design
- children's book illustration
- CD cover on Adobe Photoshop
- magazine newspaper and book layout
- packaging and the use of colour in merchandising
- advertising and poster design
- time-based media and corporate graphics.

Students are given a strong theoretical, technical and visual grounding from which to develop their designs.

Visual Design students are introduced to basic concepts, traditional and computer based techniques, materials and methods and safe practice. Students produce a substantial portfolio of design work by the end of the course.

This course complements, but does not overlap or duplicate, the Visual Arts or Design & Technology courses at Turramurra High School.



Year 9 students with an interest in art / all forms of design/advertising can *also* study Visual Arts.

This course provides an excellent foundation for students who wish to elect Visual Design and/or Visual Arts in Years 11 and 12.

HUMAN SOCIETY and its ENVIRONMENT

Commerce

Geography Elective

History Elective

Human Society and its Environment

COMMERCE

HSIE - Social Sciences Faculty

Commerce assists young people to make sound decisions on consumer, financial, business, legal and employment issues.

The main topics in Year 9 are:

- Consumer Choice
- Personal Finance-
- Running a Business-
- Political Involvement
- Travel

In Year 10 the main topics are:

- Our Economy
- Law & Society
- Investing your Money
- Employment Issues



An awareness of relevant current events is an important part of the commerce program. You will be encouraged to read the newspaper daily.

Commerce provides background information for the study of economics, business studies and legal studies in Years 11 and 12.



GEOGRAPHY Elective

HSIE - Social Sciences Faculty

The elective Geography course provides students with the opportunity to study countries and geographical processes beyond Australia

Students may study some of the following topics:

Primary Production – from paddock to plate- where does our food come from?, including an excursion to a farm.

Oceanography – ocean features, their value, who owns and controls them?

Australia's Neighbours – what do we know about our closest neighbours?

The Trans-Siberian Railway – how does a continent change as you cross it?

Computers are used extensively in elective Geography while DVD programs help to bring various locations from around the world into the classroom.

Completing elective Geography will provide and enhance student understanding of the world from a physical and socio-cultural perspective and provides background information for Senior Geography, Society and Culture and Studies of Religion in Years 11 and 12.



Human Society and its Environment

HISTORY Elective

HSIE - History Faculty

Elective History is an interesting and challenging course which covers themes, personalities and events in both the Modern and Ancient worlds.

The aim of the elective History course is to enable students to acquire the historical skills, knowledge and understanding, values and attitudes essential to an appreciation of the past and to prepare students for informed and active citizenship in a changing world.



The elective course builds upon, and consolidates, the skills taught in the mandatory Australian History course.



Students study thematic topics dealing largely with issues in both the ancient and modern world, for example: How History is Constructed, Crime and Punishment and Heroes and Villains. Students will also study aspects of earlier civilisations such as a Personality study, an ancient site study or ancient society study.

This course provides an excellent basis for 2 Unit Modern History, Ancient History, Society & Culture, Legal Studies and Studies of Religion in Years 11 and 12.

LANGUAGES other than **ENGLISH**

Chinese

Italian

Japanese

Languages Other Than English

CHINESE - JAPANESE- ITALIAN

Languages Faculty Approximate Cost: \$30.00

The languages that we offer at Turramurra High School are Chinese, Japanese and French. Language is an interesting and challenging course which will help the students to maximize their individual talents and intellectual enrichment.

Moving between countries, cultures and language has become more commonplace because of globalisation, increased ease of travel and advanced information and communication technologies. High quality education in languages enables students to respond positively to the opportunities and challenges of their rapidly changing world.

The study of languages provide opportunities for students to become more accepting of diversity, more respectful of others and more aware of their place in the international community.

Contemporary research and practice have shown that learning languages will increase meta-linguistic awareness and enhance general cognitive development.

The study of Chinese, Japanese and French provide students with opportunities for continued learning and for future employment, both domestically and internationally, in areas such as commerce, tourism, hospitality and international relations.

With the increasing global and economic importance of Asia, it will benefit students to learn Chinese and/or Japanese in order to gain access to the information available in these languages.

French is the official language of many countries around the world and is spoken on every continent.

The objectives of learning Languages emphasize on

- Using Language
 - Students will develop the knowledge, understanding and the listening, reading, speaking and writing skills necessary for effective interaction in the target language.
- Moving between Cultures

Students will develop knowledge of the cultures of Chinese, Japanese and French communities and an understanding of the interdependence of language and culture, thereby encouraging reflection on their own cultural heritage.

Students will develop a proficiency in the target language and study different aspects of culture. Other than traditional classroom methods, high technology is used in the classroom to acquire the language and cultural knowledge. Since culture enrichment is a feature of language study, students will have the opportunity to view films, see exhibitions, and visit restaurants as part of their course work. Students will learn to actively communicate and are given the opportunity to travel to that country to use their language every other year. Opportunity may arise to gain a scholarship for study in China.



PERSONAL DEVELOPMENT, HEALTH and PHYSICAL EDUCATION

Physical Activity & Sport Studies (P.A.S.S.)

Physical Development, Health and Physical Education

PHYSICAL ACTIVITY & SPORT STUDIES (P.A.S.S.)

PDHPE Faculty

Physical Activity & Sport Studies is a Content Endorsed Course designed to complement, rather than replace, the existing practical studies in the core (Years 7–10) Physical Education program. It aims to develop in students an understanding of the human body and its capacity for physical performance and also to extend their knowledge of the scientific principles relating to training, playing and coaching sport.

Schools develop programs by selecting one or more modules from each Area of Study.

Areas of Study}	Foundations of Physical Activity	Physical Activity and Sport in Society	Enhancing Participation and Performance
M O D U L E S	 Body systems and energy for physical activity Physical activity for health Physical fitness Fundamentals of movement skill development Nutrition and physical activity Participating with safety 	 Australia's sporting identity Lifestyle, leisure and recreation Physical activity and sport for specific groups Opportunities and pathways in physical activity and sport Issues in physical activity and sport 	 Promoting active lifestyles Coaching Enhancing performance – strategies and techniques Technology, participation and performance Event management

Learning through

experiences in physical activity and sport movement applications

Lab/practical sessions will enable students to apply this new knowledge to their specific areas of interest — coaching teams, organising competitions and so on.

This course would be of interest to those students wishing to pursue a career in sport sciences and/or related fields (physiotherapy, physiology, physical education, related services in the health and fitness industry, sports coaching and sports medicine or personal training.

Students will be able to further their studies in this field in Years 11 and 12 by electing the 2 Unit Personal Development/Health/Physical Education course.

TECHNOLOGICAL and APPLIED STUDIES

Food Technology

Graphics Technology

Industrial Technology – Metal (Jewellery)

Industrial Technology – Timber

Information & Software Technology

Industrial Technology – Engineering (istEm)

Textiles and Design

FOOD TECHNOLOGY

Home Economics Faculty



Approximate Cost: \$100.00

The study of Food Technology in years 9 and 10 will explore food related issues through a range of practical experiences, allowing students to make informed, creative and effective decisions about food.

Cooking food is a science and understanding the way food behaves when you prepare and process it will ensure success and enable students to make changes to suit different needs and occasions.

Students gain a broad knowledge of food properties, processing and preparation techniques.

Community concerns about nutritional claims and quality, consumption patterns, genetic engineering and ethical and sustainable food sourcing is now fundamental in this subject.

Practical skills will be developed in our commercial kitchen through:

- weekly practical lessons
- food presentation and photography
- demonstration of skills and techniques
- industry case studies
- excursions
- practical assessments
- ICT applications

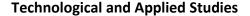




Focus areas that will be covered include:

- Food in Australia
- Food for Special Need
- Food Selection and Health
- Food Service and Catering
- Food for Special Occasion
- Food Trends

Integral to this subject is the ability to design, produce and evaluate solutions to situations involving food. This course provides career pathways and numerous employment opportunities in the Australian Food industry and provides an excellent basis for the 2 unit Food Technology and VET Hospitality courses in Years 11 and 12.



GRAPHICS TECHNOLOGY

Industrial Arts Faculty Approximate Cost: \$15.00

Thinking of a career in Architecture, Industrial Design, Engineering or Construction? Then you should be considering Graphics Technology as an elective subject in Years 9 and 10.

During this course students will learn how to read and present graphical information to technical people (such as builders, engineers and architects), develop skills in sketching to help them develop their design ideas as well as learning modern presentation techniques such as the rendering techniques used by graphic artists for advertising.

During the course all students will receive hands-on experience in 2D and 3D computer-aided design (CAD) using GardenPlanner, SketchUp and Fusion 360 and Computer Aided Manufacturing (CAM) using our Laser Cutter and 3D Printers. The student's own design work will also feature in areas such as





- Graphic design
- Product design
- Engineering



Those students who plan to study Engineering Studies, Design & Technology and/or Industrial Technology in the senior school will find this course of significant benefit.

It is possible to choose Graphics Technology in conjunction with any of the other courses offered by the Industrial Arts Faculty (Industrial Technology – Metal (Jewellery), Industrial Technology – Engineering, Industrial Technology – Timber, and/or Information & Software Technology).

INDUSTRIAL TECHNOLOGY – Metal (Jewellery)

Industrial Arts Faculty Approximate Cost: \$65.00

What will students learn to do?

Students undertaking Industrial Technology – Metal (Jewellery) will be involved in a number of practical tasks beginning with material based exploration using a range of art metal and jewellery methods, materials and equipment.



They will produce pieces of jewellery such as sterling silver rings, copper pendants and bracelets as well as art metal products such as decorative copper bowls and wrought iron style candle holders.



Students will have the opportunity to learn not only physical skills but also how to think like a designer. Associated theory will allow students to develop skills and knowledge in choosing suitable materials and construction techniques, reading and creating design and manufacturing drawings, as well as developing design modification skills.

While developing an appreciation for good design, students will gain experience in the safe use of many hand, portable and fixed tools and machines, experience a range of materials, use modern techniques to manufacture art metal products, while examining the art metal workplace and its influence on our society and environment.

This course provides pathways into careers in the jewellery industry and a range of design orientated occupations.

Industrial Technology – Art Metal / Jewellery provides students with an excellent basis should they wish to select Design & Technology in Years 11 and 12.

It is possible to choose Industrial Technology – Metal (Jewellery) in conjunction with any of the other courses offered by the Industrial Arts Faculty (Industrial Technology – Engineering (istEm), Industrial Technology – Timber, Information & Software Technology and/or Graphics Technology).

INDUSTRIAL TECHNOLOGY - Wood

Industrial Arts Faculty Approximate Cost: \$80.00



Industrial Technology – Timber encourages students to further develop their skills in working with timber. It involves the designing and making of cabinet work and also wood machining projects from timber and associated materials.

Students learn how to correctly use a wide range of hand and power tools such as sanders, drills, biscuit cutters, routers, jigsaws and lathes in our well-equipped workshops. Projects may include desk organisers, jewellery boxes, wood turning and curio cabinets.

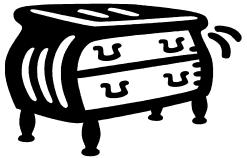
Theory work covers topics such as:

- Design of timber articles
- Properties and uses of timber
- Technology associated with the timber industry
- Current industrial practices
- School to work links
- Environmental issues
- Work, health and safety (WHS) issues.

During the course all students will receive hands-on experience in 2D and 3D computer-aided drawing (CAD) and Computer Aided Manufacturing (CAM) using our **Laser Cutter**.

Industrial Technology – Timber provides students with an excellent basis should they wish to select either Design & Technology and/or Industrial Technology in Years 11 and 12.

It is possible to choose Industrial Technology – Timber in conjunction with any of the other courses offered by the Industrial Arts Faculty (Industrial Technology – Metal (Jewellery), Industrial Technology – Engineering (istEm), Information & Software Technology and/or Graphics Technology).





INFORMATION & SOFTWARE TECHNOLOGY

Industrial Arts / Mathematics Faculty

Objectives

To develop students' knowledge and understanding, confidence and creativity in analysing, designing, developing and evaluation information and software technology solutions.

Content

This course integrates the study of core content within options delivered through projects. The following shows how the content is organised.

Core Content

- Design, Produce and Evaluate
- Data Handling
- Hardware
- Issues
- Past, Current and Emerging Technologies
- People
- Software

Projects

Used to integrate Core Content with Options

Options

- For one-year courses, two of the options below will be studied.
- For two-year courses, four of the options below will be studied.
 - Authoring and Multimedia
 - Database Design
 - Digital Media
 - Internet and Website Development
 - Software Development and Programming
 - Robotics and automated systems

Applications software

Robotics (EV3 software & Drones)
 Word Processing (Microsoft Word, WebTools)

Spreadsheets (Microsoft Excel)
 Database Design (Microsoft Access)

Presentation Software (Microsoft PowerPoint, WebTools)

Graphics (PhotoShop; Illustrator, Fireworks, 3DtinkerCAD)

Internet and Web design
 Programming
 Animation
 (HTML, Dreamweaver, Web 2.0 tools)
 (Visual Basic; Python; Scratch; Kodu; Alice)
 (Flash; Adobe Premiere, Fireworks Audacity)

Desktop publishing (InDesign, Publisher, Adobe Acrobat, Adobe MediaEncoder)

Video Editing (Adobe Premier, Element)

Assessment

Students will be assessed on: their knowledge and understanding of concepts and principles; knowledge of basic terminology; ability to use software applications; awareness of ethical, social and industrial issues. Students are expected to bring an exercise book to each lesson. Assessment will be in the form of: practical class exercises; project work; formal examinations.



Approximate Cost: \$130.00



Indistrial Technology: Engineering (istEm)

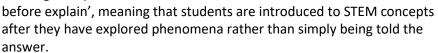
Industrial Arts Faculty Approximate Cost: \$45.00

Industrial Technology: Engineering presents engineering, maths and sciences to students in ways that challenge not only their understanding of these key subjects but also their ability to manage projects and work in teams.

To satisfy the requirements of the course students must undertake a range of inquiry based (IBL) and project based (PBL) learning activities which occupy the majority of course time.



The core principle that has been used to describe inquiry based learning is 'explore



nose cone

pop bottle

water

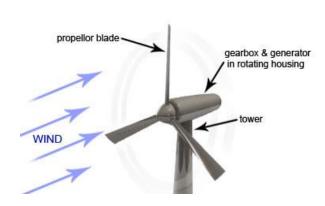
nozzle

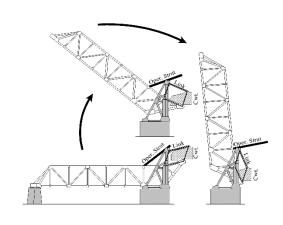
expelled water

pressurized air

Project-Based Learning (PBL) is organised around an open-ended question or challenge that requires and promotes critical thinking, problem solving, collaboration and various forms of communication.

Inquiry-based and project based learning assists students to actively pursue and use STEM based knowledge beyond the simple transmission of content.





thrust

weight

air friction

Students will learn to use a range of tools, techniques and processes, including relevant technologies in order to develop solutions to a wide variety of problems and challenges relating to the modules being studied.



The study of Industrial Technology: Engineering in Years 9 and 10 would provide an excellent basis for the study of Engineering Studies and Design and Technology in Years 11 and 12.

NOTE:

It is possible to choose Industrial Technology: Engineering in conjunction with any of the other courses offered by the Industrial Arts Faculty

- Graphics Technology)
- Industrial Technology Art Metal/Jewellery,
- Industrial Technology Wood





TEXTILES TECHNOLOGY

Home Economics Faculty

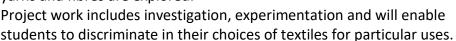


Approximate Cost: \$50.00 + materials for textile projects

Textiles Technology involves students learning a range of artistic and creative skills as well as developing confidence in designing and producing a range of expressive and functional textile items.



Students will gain knowledge about the properties, performance and uses of textiles in which fabrics, colouration, yarns and fibres are explored.



Students will document and communicate their design ideas and experiences; and make use of contemporary technology, presenting ideas in a folio. Completion of projects is integral to developing skills

and confidence in the manipulation and use of a range of textile materials, equipment and techniques.

Textile projects form the basis of all units of work and will give students the opportunity to be creative, independent learners and to explore functional and aesthetic aspects of textiles, encouraging individuals to express ideas and opinions.

Students will complete a range of units that will encompass apparel, furnishings, costumes, textile arts and non-apparel. This will use techniques of dyeing, knitting, felting, deconstructing and reconstructing of textile items.



This course provides an excellent basis for Textiles and Design and/or Design and Technology in Years 11 and 12.



