



# COURSE HANDBOOK

AN INFORMATION  
GUIDE FOR PARENTS  
TO **YEAR 9 STUDIES**  
AT THORN LIE SENIOR  
HIGH SCHOOL

2025



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## INTRODUCTION

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The curriculum at Thornlie Senior High School for students in Year 9 is designed to specifically serve the needs of young adolescents. It is the aim of Thornlie Senior High School that every student has the opportunity to succeed academically so that when they exit secondary school they are literate, numerate, and educated/trained sufficiently well to enable them to take their place in our society as responsible and productive citizens.

Thornlie Senior High School strives to foster a caring educational environment based on cooperation, self-responsibility and mutual respect while endeavouring to engage and stimulate students in an ever-changing world.

This booklet serves to provide parents and students with the necessary information about the curriculum offerings and to assist students and parents in making informed Year 9 subject selections. Parents and students are encouraged to work together to select appropriate courses.

Should you have any questions regarding course selection please contact the school on 6235 7900 during school office hours (8:00 am – 4:00 pm).



## YEAR 9 COURSE SELECTION

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## CURRICULUM REQUIREMENTS

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Listed below are the course requirements for Year 9 students. The curriculum is designed to give students an opportunity to experience subjects from the eight (8) different learning areas. From the following table it can be seen that 19 periods are taken up with compulsory subjects. Students need to select 3 more subjects to ensure they are studying a total of 25 periods per week for each semester.

COMPULSORY SUBJECTS	NO. OF PERIODS PER WEEK FOR THE WEEK
English	4
Mathematics	4
Science	4
Humanities and Social Sciences	4
Physical Education	2
Health Education	1
<b>3 ELECTIVES MUST BE CHOSEN FROM THE FOLLOWING AREAS</b>	
The Arts	
Languages	
Specialised Physical Education	
Technologies	
<b>TOTAL ELECTIVE PERIODS PER WEEK</b>	<b>6</b>
<b>TOTAL PERIODS PER FOR THE WEEK</b>	<b>25</b>

### Note:

- It is not guaranteed that students will be able to be enrolled in all of their requested subjects due to resource and timetable constraints.
- If a student selects a high cost elective their enrolment in the subject is only guaranteed when their school fees are paid in full.
- Failure to pay will result in the student being withdrawn from the subject or being unable to participate fully in the subject.
- Please complete the student choice selections thoughtfully as the ranked list for each learning area will assist in placing students in the next available subject.

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## SPECIALISED & SCHOLARSHIP PROGRAMS

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Thornlie Senior High School offers the following Specialist and Scholarship programs:

- Specialist Rugby
- Academic Excellence
- Instrumental Music
- Netball

Students who indicated their interest in one or more of these programs upon enrolment in Year 7 and participated in testing, auditions and trials are to be considered are invited to continue with the program, if achieving satisfactory progress, through to the completion of Year 10. Other students performing well outside the program may be offered an Academic Excellence position in English, Mathematics, Science and Humanities and Social Sciences.

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## THE ARTS

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*In The Arts Learning Area, students develop creative skills, critical appreciation and knowledge of artistic techniques and technologies in Dance, Graphic Design, Media, Visual Arts and combinations of arts forms. The Arts develops students' sense of personal and cultural identity and equips them for lifelong involvement in and the appreciation of The Arts.*

**Please note:**

*For the student to be enrolled in their selected electives, any elective costing more than \$70.00 must be paid in full when paying the 50% minimum of the total subject costs. If the balance is not paid prior to the commencement of the school year, the student may be moved into a low-cost elective class.*

### DANCE - 9DAN

In Year 9 Dance, students will investigate the evolution of, and refine their technical competence in, specific dance genres including Jazz, Tap, Ballet, Lyrical, Contemporary, Pom, Cultural Dance and elements of Cheerleading and Acrobatics. Students will be required to present practical classwork to an audience in a professional performance, focusing on retention and clarity of movement, projection, focus, expression and musicality. Students will be given opportunities to choreograph using the elements of dance, choreographic devices and structures to develop their choreographic intent. Safe dance practices underlie all experiences as students perform within their own body capabilities and work safely in groups.

### GRAPHIC DESIGN: DIGITAL DYNAMICS - 9GD

In this course, students are introduced to a range of basic design processes and practices as well as design materials and technologies. Students learn to develop visual ideas and concepts, using design skills/technology, Adobe Photoshop and Illustrator. During the course, students will obtain knowledge in the elements and principles of design which will result in designing in a range of industries that can include the advertising sector, logo design, posters, packaging and character design.

### MEDIA

#### **Stream 1: The World of Mass Media – 9MEDW**

The Arts Learning Area offers Year 9 students a unique program in Media. Students accepted into this course will use the latest technologies as they create and complete tasks in the areas of film, print media, animation and popular culture. Students will develop media skills and techniques as they work independently and in teams, creating projects in the fields of short feature films, advertising and photography. Projects specific to actual industry-based tasks. They will develop their knowledge using the Adobe CC Suite, such as Adobe Photoshop, Illustrator, Lightroom and Premiere Rush, as well as apps particular to media industries. By participating in the media course students will also develop the skills of self-discipline, self-reliance, and team spirit, creativity and confidence in their ability that are required for further studies in media.

#### **Stream 2: Movie Magic – 9MEDM**

In this pathway of Media, it's a behind the scenes look at all things movies and theatre. Students are introduced to a range of design process and practises that lead into the use of different materials and technologies. Students will participate in both the practical and theory components of the unit including things like, special effect makeup, set design, sound, lighting response and effects and prop construction. This is a creative class that will lead into many opportunities for future studies in Media or the Performing arts as well as open pathways in the creative industries.

### VISUAL ARTS: ARTISTRY UNLEASHED

#### **Stream 1: Personal Expression and Audience – 9VAP**

In Year 9 Personal Expression and Audience, students use visual art language and artistic conventions of greater complexity during their design and production process. They document their ideas applying understanding of compositional structure to create a unique personal response, while representing either a theme/concept or subject

matter. Students will have the opportunity explore traditional materials and techniques, when producing 2D or 3D artworks. Students experience a growing awareness of how and why artists, are influenced by other artists, their environment and the contexts of culture, time and place. They continue to apply knowledge of techniques used by other artists in the production of their own work. Students' artworks are displayed to a variety of audiences including opportunities to have their work in the Arts and technologies Exhibitions.

Projects including Painting, Drawing, Sculpture, Landscape Skills, Expressionism, Cubism and Architect Skills.

### **Stream 2: Craft Artistic Design and Urban Industry – 9VAU**

In Year 9 Craft Artistic Design and Urban Industry, students use visual art language and artistic conventions of greater complexity during their design and production process. They experiment with media, materials and technologies, and document results. Students select and apply elements and principles and artistic conventions to arrive at visual solutions. Students will have the opportunity explore contemporary materials and techniques, when producing 2D or 3D artworks. Students experience a growing awareness of how and why craftspeople and/or designers are influenced by other artists, their environment and the contexts of culture, time and place. They continue to apply knowledge of techniques used by other artists in the production of their own work. Students' artworks are displayed to a variety of audiences including opportunities to have their work in the Arts and technologies Exhibitions.

Projects including Pop Art, Op Art, Street/Urban Art, Recycled Jewelry, Character Design, Illustration.

### **INSTRUMENTAL MUSIC - 9IM**

This course continues the specialised music program for all scholarship music students who are learning an instrument or voice through the Instrumental Music School Services (IMSS) program. The course is designed to provide intensive training in music through the areas of Aural, Theory, Arranging & Composing, Performing and History of Music. Students in this program will receive *free* weekly instrumental or voice lessons from specialist teachers from the IMSS and will also be expected to participate in a large group ensemble – Guitar Ensemble (Junior or Senior), Choir or Concert Band to enhance their learning experience and generate opportunities to perform at both music concerts and festivals throughout the year. All students who participated in Year 8 instrumental music are expected to continue their music studies in this subject in Year 9 in order to continue to receive their *free* instrumental tuition.

#### **Prerequisites:**

1. Students must have **successfully auditioned** to be considered for this program.

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## **ENGLISH**

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***In the English Learning Area, students learn about the English language - how it works and how to use it effectively. They develop an understanding of the ways in which language operates as a social process and how to use language in a variety of forms and situations. They learn to speak, listen, view, read and write effectively.***

English courses at Thornlie Senior High School are designed using the Australian Curriculum. These courses are also designed to facilitate a smooth transition into upper school courses.

English is a compulsory course and all students will study English for four (4) periods per week for the year. English courses at Thornlie Senior High School are designed using the Australian Curriculum. These courses are also designed to facilitate a smooth transition into upper school courses.

The English curriculum is built around the three interrelated strands of language, literature and literacy. Teaching and learning programs should balance and integrate all three strands. Together, the strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking, writing and creating. Learning in English builds on concepts, skills and processes developed in earlier years, and teachers will revisit and strengthen these as needed.

In Year 9, students interact with peers, teachers, individuals, groups and community members in a range of face-to-face and online/virtual environments. They experience learning in familiar and unfamiliar contexts, including local community, vocational and global contexts.

## ENGLISH - 9EN

The English curriculum is built around the three interrelated strands of language, literature and literacy. Teaching and learning programs should balance and integrate all three strands. Together, the strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking, writing and creating. Learning in English builds on concepts, skills and processes developed in earlier years, and teachers will revisit and strengthen these as needed.

- **Receptive modes (listening, reading and viewing):**

Students evaluate how text structures can be used in innovative ways by different authors. They explain how the choice of language features, images and vocabulary contributes to the development of individual style. They develop and justify their own interpretations of texts. They evaluate other interpretations, analysing the evidence used to support them. They listen for ways features within texts can be manipulated to achieve particular effects.

- **Productive modes (speaking, writing and creating):**

Students show how the selection of language features can achieve precision and stylistic effect. They explain different viewpoints, attitudes and perspectives through the development of cohesive and logical arguments. They develop their own style by experimenting with language features, stylistic devices, text structures and images. Students create a wide range of texts to articulate complex ideas. They make presentations and contribute actively to class and group discussions, building on others' ideas, solving problems, justifying opinions and developing and expanding arguments. They demonstrate understanding of grammar, vary vocabulary choices for impact, and accurately use spelling and punctuation when creating and editing texts.

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## HEALTH & PHYSICAL EDUCATION

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*The Health and Physical Education curriculum provided opportunities for students to develop, enhance and exhibit attitudes and values that promote a healthy lifestyle.*

In Year 9, the content provides for students to broaden their knowledge of the factors that shape their personal identity and the health and wellbeing of others. They further develop their ability to make informed decisions, taking into consideration the influence of external factors on their behaviour and their capacity to achieve a healthy lifestyle. They continue to develop knowledge, skills, and understandings in relation to respectful relationships. With a focus on relationship skills that promote positive interactions and manage conflict.

Students focus on elements of speed and accuracy in different movement environments, while continuing to develop the efficiency of specialised movement skills. They explore ways to evaluate their own and others' performances through analysis of skills and movement patterns using basic biomechanical concepts. Students transfer previous knowledge of outcomes in movement situations to inform and refine skills, strategies and tactics to maximise success.

Opportunities are provided for students to refine and consolidate skills and strategies for effective leadership and teamwork, and consistently apply ethical behaviour across a range of contexts.

### **Physical Education Uniform:**

Parents need to be aware that all students must change for all Physical Education classes. Students are required to wear:

- TSHS Physical Education shirt bought through Uniform Concepts
- Plain black shorts or track suit pants
- Sports shoes



## COMPULSORY HEALTH & PHYSICAL EDUCATION SUBJECTS

### HEALTH EDUCATION - 9HE

Students identify skills and strategies to manage change and promote all aspects of their own and others' health, including making informed decisions, using assertive responses, and making contingency plans to avoid and prevent risks to health. Students identify the impact of negative behaviours on relationships and describe a range of factors and their impact on a person's emotional response and behaviour.

**Semester One Units:** Identity, Alcohol & Healthcare Systems.

**Semester Two Units:** Respectful Relationships & Stress Management.

### PHYSICAL EDUCATION GENERAL - 9PE

Students perform a variety of individual movement skills and sequences demonstrating improved control, accuracy and efficiency in their performance. In competitive contexts, they implement a variety of tactics to achieve and intended outcome. Students provide simple descriptions of how to measure physical responses to changes in movement. They action and understand linear, angular and general motion when reflecting on ways to improve performance outcomes. When faced with movement challenges, they select and implement simple tactical responses to achieve an intended outcome.

**Semester One:** Invasion Games / Striking & Fielding

**Semester Two:** Athletics / Net & Wall Sports

## SPECIALISED PHYSICAL EDUCATION ELECTIVES

### ***Please note:***

*For the student to be enrolled in their selected electives, any elective costing more than \$70.00 must be paid in full when paying the 50% minimum of the total subject costs. If the balance is not paid prior to the commencement of the school year, the student may be moved into a low-cost elective class.*

### NETBALL - 9NET

This year long course continues to develop the fundamental skills of Netball. The course will focus on individual netball technique and teamwork. From this course, students will be selected to represent Thornlie Senior High School at interschool tournaments and matches. Students will have the opportunity to have occasional guest coaches from Netball WA specializing in umpiring and skill development.

#### **Prerequisites:**

1. Students **must** be a competent netball player and have an interest and desire to improve their skills.
2. Achieved a **'C' grade or above** in Year 8 Physical Education.
3. Achieved **'often' or above** in attributes in Year 8 Physical Education.

### PHYSICAL RECREATION - 9PR

This course provides students the opportunity to achieve the HPE outcomes in a non-competitive environment. It is designed to give students experiences in a variety of recreational pursuits at school. These *may* include: Archery, Table Tennis, Trampolining, Weights & Fitness, Indoor Soccer, and Bike Riding.

#### **Prerequisites:**

1. Achieved a **'C' grade or above** in Year 8 Physical Education.
2. Achieved **'often' or above** in attributes in Year 8 Physical Education.
3. As places in this course are limited and students are often off campus using public facilities, students who choose this course must **have and maintain** a record of exemplary behaviour.

### SPECIALISED RUGBY - 9RDP

This course is designed as a continuation of the Year 8 Specialist Rugby Development Program and provides a progression into higher level skill development and knowledge in Rugby Union, Rugby League, Touch and League Tag for Year 9 players.

Students will continue to receive expert tuition from Thornlie SHS Rugby Academy staff, RugbyWA and NRL Junior Development Officers, guest coaches and speakers. Our aim is to continue to develop each student's individual skills, physical fitness, game abilities, and knowledge, so that they may reach their full potential in their chosen code. Within this program we will continue to place an emphasis on personal goal setting, values and leadership skills. Individuals will also be given an opportunity to learn and apply the different officiating skills at matches and carnivals. Students will once again have the chance to gain selection into one of our school representative teams and then compete in one or more of the Union, League, Touch and League-Tag inter-school competitions and carnivals held throughout the year.

#### **Selection Criteria:**

Selection will be based on physical skill levels and academic attitude. Skill tests will be conducted at the school under the supervision of coaching staff. Successful applicants will be required to meet the following expectations:

- Participate consistently and to the best of their ability throughout their involvement in the Rugby program.
- Maintain a school **attendance of 80% or more**.
- Develop a positive attitude towards the school ethos.
- Maintain a **'C' grade average** or, working to the best of their ability towards it.
- **Outstanding behaviour** record towards staff, peers and the wider community.

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## HUMANITIES AND SOCIAL SCIENCES

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***The Humanities and Social Sciences Learning Area develops students' understanding of how individuals and groups live together and interact with their environment. Students develop a respect for cultural heritage and a commitment to social justice, the democratic process and ecological sustainability.***

Humanities & Social Sciences is compulsory for all students in Year 10. Students will study HASS for four (4) periods per week for the year. Humanities & Social Sciences aims to provide students with the skills, understandings and values to be effective citizens in Australian society.

#### **HUMANITIES & SOCIAL SCIENCES - 9HASS**

In Year 9, Humanities and Social Sciences consists of Civics and Citizenship, Economics and Business, Geography and History. Students develop increasing independence in critical thinking and skill application, which includes questioning, researching, analysing, evaluating, communicating and reflecting. They apply these skills to investigate events, developments, issues and phenomena, both historical and contemporary.

- **Civics and Citizenship**

Students continue to build on their understanding of the concepts of the Westminster system, democracy, democratic values, justice and participation. They examine the role of key players in the political system, the way citizens' decisions are shaped during an election campaign and how a government is formed. Students investigate how Australia's court system works in support of a democratic and just society.

- **Economics and Business**

Students are introduced to the concepts of specialisation and trade while continuing to further their understanding of the key concepts of scarcity, making choices, interdependence, and allocation and markets. They examine the connections between consumers, businesses and government, both within Australia and with other countries, through the flow of goods, services and resources in a global economy. The roles and responsibilities of the participants in the changing Australian and global workplace are explored.

- **Geography**

The concepts of place, space, environment, interconnection, sustainability and change continue to be developed as a way of thinking, which provides students with an opportunity to inquire into the production of food and fibre, the role of the biotic environment and to explore how people, through their choices and actions, are connected to places in a variety of ways. Students apply this understanding to a wide range of places and environments at the full range of scales, from local to global, and in a range of locations. Biomes and food security are the main focus of study in this unit. Students examine the role of the environment and its role in food and fibre production

and the challenges that result from expanding production in the future. Students will also examine the connections between people and places and the effects of transport and information technologies.

- **History**

Students develop their historical understanding through key concepts, including evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts are investigated within the historical context of the making of the modern world from 1750 to 1918. It was a period of industrialisation and rapid change in the ways people lived, worked and thought. It was also a period of nationalism, imperialism and the colonisation of Australia. They consider how new ideas and technological developments contributed to change in this period, and the significance of World War I.

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## LANGUAGES

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*In the Languages Learning Area, students learn to communicate effectively in languages other than English. They gain an understanding of other societies, the ability to interact with people and cultures other than their own and practical skills which they can use in future social, cultural and vocational areas. Through languages, students are also able to further develop their skills and understandings in English and literacy in general.*

Languages are an integral part of a balanced academic course of study. All students with an aptitude and interest in languages are strongly encouraged to continue their studies into Year 9 and beyond.

### JAPANESE - 9JSL

An additional language is a valuable asset in a rapidly globalising Australia. Being able to communicate with people around the world gives students the chance to learn more about their own lives, as well as the lives of others. Japanese has been taught in Australia for over 100 years and is the most widely taught second language in Australian schools.

Japan is one of Australia's closest friends in our Asia-Pacific neighbourhood. Japan remains our second-closest trading partner, and Japanese-speaking Australians are highly-valued employees all over the world. Japan and Australia participate in close cultural exchange. From dance to painting, music to sport, learning more about Japanese language and culture will open students' eyes to a history and people that are constantly changing, and always fascinating.

In Year 9, students will build on the language skills they acquired in Year 8 and explore the culture and language of Japan through the topics of school life, family and holidays.

#### Prerequisites:

1. Students **must** have completed Japanese in Year 9.

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## MATHEMATICS

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*In Mathematics, students learn to use ideas about number, space, measurement and chance. Students will use mathematical ways of representing patterns and relationships, to describe, interpret and reason about their social and physical world. Mathematics plays a key role in the development of student' numeracy and assists learning across the curriculum.*

Mathematics is compulsory with all students studying Mathematics for four (4) periods per week for the year. Students in Year 9 will be exposed to mathematical concepts appropriate to the ability range of the students.

The class allocation (based on Year 8 achievement) will provide students with the maximum opportunity to progress and demonstrate achievement.

## MATHEMATICS - 10MA

By studying Mathematics, students develop the ability to

- appreciate the essential role mathematics has had, and continues to have in their lives, and that of the community
- demonstrate interest, enjoyment and confidence in the pursuit and application of mathematical knowledge, skills and understanding to solve everyday problems
- use mathematical thinking processes and skills in interpreting and dealing with mathematical and non-mathematical situations.
- explore and apply Problem-Solving strategies when dealing with situations when no solution method is obvious, and the solution method is not given in advance.
- demonstrate perseverance in undertaking mathematical challenges
- describe and analyse mathematically the spatial features of objects, environments and movements.
- use direct and indirect measurement and estimation skills to describe, compare, evaluate, plan and construct.
- use their knowledge of chance and data handling processes in dealing with data and with situations where uncertainty is involved.
- use numbers and operations and the relationships between them efficiently and flexibly.
- use algebraic symbols, diagrams and graphs to understand, to describe and to reason.

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## SCIENCE

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***In the Science Learning Area, students learn to investigate, understand and communicate about the biological, physical and technological worlds and value the processes that support life on our planet. Science helps students to become critical thinking by encouraging them to use evidence to evaluate the use of science in society and the application of science in daily life.***

Science is compulsory and all students will study Science for four (4) periods per week for the year.

### SCIENCE - 9SC

Science aims to foster critical thinking and problem-solving abilities in students, enabling them to navigate the challenges of the modern world with confidence. All science students follow a program developed around the four content strands of the Australian Curriculum: Biological Science, Chemical Science, Earth and Space Science and Physical Science. All within the context of the three process strands Science Understanding, Science as a Human Endeavour and Science Inquiry Skills.

Over Years 7 to 10, students develop their understanding of microscopic and atomic structures, how systems at a range of scales are shaped by flows of energy and matter and interactions due to forces, and develop the ability to quantify changes and relative amounts.

In Year 9, students consider the operation of systems at a range of scales. They explore ways in which the human body as a system responds to its external environment and the interdependencies between biotic and abiotic components of ecosystems (Biological Science). They are introduced to the notion of the atom as a system of protons, electrons and neutrons, and how this system can change through nuclear decay (Chemical Science).

They learn that matter can be rearranged through chemical change and that these changes play an important role in many systems. They are introduced to the concept of the conservation of matter and begin to develop a more sophisticated view of energy transfer (Physical Science). They begin to apply their understanding of energy and forces to global systems such as continental movement (Earth and Space Science).

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## TECHNOLOGIES

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*In the Technologies Learning Area, students apply knowledge, skills, experience and resources to the development of technological solutions that are designed to meet the changing needs of individuals, societies and environments. Students become innovative, adaptable and reflective as they select and use appropriate materials, information, systems and process to create solutions that consider the short and long – term impact on societies and environments.*

**Please note:**

*For the student to be enrolled in their selected electives, any elective costing more than \$70.00 must be paid in full when paying the 50% minimum of the total subject costs. If the balance is not paid prior to the commencement of the school year, the student may be moved into a low-cost elective class.*

The Technologies learning area comprises three departments – (i) Digital Technologies and Business, (ii) Design and Technology, and (iii) Home Economics.

### **FLASH ONE - 9FO**

This course is designed around Multimedia applications and their uses. Software includes macromedia products such as Flash, Director, Adobe Photoshop, Movie Maker, Sound Studio. Students will create digital photographs, DVD menus, their own sound samples, plug ins for WebPages and simple games. This course is a good introduction to software and basic computing with a hint of the fun stuff. Imagination is required. For future web designers, graphic artists, animators and sound engineers.

### **SMALL BUSINESS ENTERPRISE - 9SBE**

This course will cover the development of skills in a wide range of study within the business field. In this course, students have the opportunity to plan and develop small business ideas within small work groups, integrating different forms of technology and business processes. Using a combination of theoretical and practical business knowledge and skills, students will investigate, plan and evaluate business ideas. The real-time viability and success of their business ideas will depend on their ability to work collaboratively in a team in a simulated business environment. This is an excellent subject to introduce students to the real world of how small businesses start up and evolve. This course is perfect for motivated students with creativity, imagination and a can-do attitude.

### **COMPUTER PROGRAMMING - 9CP**

Understanding of computer programming, databases and game creation is a useful skill to have in this day and age. Computer Programming covers the basics of programming and is a good lead up to the computer science course in Years 11 and 12. This course covers basics such as HTML, Python, Java Script and networking basics. Basics of databases and design will also be covered. In this subject students will be writing code for both webpages and game creation. Hardware and networking devices will also be covered to give students an overall grounding in information technology and how the world really works.

The course focusses on the practical creation of programs and games but also the grounding of theory and problem solving to encourage these skills to progress in further years. Students will need good problem-solving skills, logical thinking and the acceptability of new ideas is necessary. Students will create programs, web-sites, databases and network security solutions that incorporate real world skills.

### **ENGINEERING SYSTEMS - 9ES**

This course is designed to give students experiences and skills in a broad range of Engineering Systems. Students will learn practical skills in Welding (Arc, MIG & Oxy/Acetylene), tool maintenance, manufacturing, and machining. Students will also learn small engine theory, maintenance, and repair procedures. This course will give the student an

opportunity to make a range of interesting and useful projects as well as working on their engines. There is a strong focus on Occupational Health & Safety for all students and is relevant to anyone who is planning to apply for a trade apprenticeship in mechanical or metals engineering.

### **MATERIALS TECHNOLOGY - 9MAT**

Materials Technology is about students making a range of interesting projects that build on skills introduced in the Year 8 course. Many of the designs are craft orientated and encourage students to use a variety of materials including wood, metals and plastics either separately or in combination. Students will also learn how to safely use workshop equipment such as woodworking and metalworking lathes, bending equipment, electric drills, jigsaws, finishing machines, electric sanders, oxy-acetylene equipment and buffing machines. This course has a strong focus on design, safety and the enjoyment that comes from making a range of attractive and useful projects.

### **MATERIALS WOOD – 9MW**

This course is aimed at those students who have limited or no experience in Year 8 Woodwork but wish to attain the necessary background to enrol in Materials Wood at Year 9 level. Students will learn how to safely use a range of workshop equipment such as wood lathes, electric drills, bandsaws, finishing machines, electric sanders etc. Students will also use equipment associated with staining and spraying finished pieces. This course has a strong focus on design, safety and the enjoyment that comes from designing and making a range of interesting projects. Students who wish to extend their knowledge and experience further in this area should choose the Woodwork course for future Year 10 studies.

### **TECHNICAL GRAPHICS - 9TG**

This course has a strong emphasis on applying computer technology in teaching and developing skills in drafting and technical illustration. The learning opportunities in this course have a direct relevance to the skills required by industry, TAFE and universities. The primary areas of study in this course are:

- Architectural and Mechanical Drawing
- Pictorial Drawing and Technical Illustration
- Rendering of Drawings
- 3D modelling software
- Introduction to AutoCAD – Industry standard Computer Aided Drafting software

Students will produce a folio that includes computer-generated drawings as well as sketches, illustrations, and designs for a range of different tasks. This course is highly recommended for students looking to develop a career in Drafting, Engineering and/or Architecture.

### **MECHATRONICS – 9MEC**

Mechatronics is a branch of engineering that combines a range of skills including mechanics, electronics, and robotics. In Year 9, the course focuses on students developing an understanding and skills in the interaction of mechanical, electrical and communication technology. Within the course, students will undertake 60% Practical work and 40% theory and design tasks. As it is a STEM course, it can help provide a foundation for later studies in engineering and trade skills.

### **STEM - 9STEM**

The aim of the course is to allow students to integrate and apply their science, technology, engineering and mathematical (STEM) skills. Project based inquiry learning is used to develop their capabilities in these areas.

Throughout the course, students will collaborate and work effectively in teams. They utilise their communication, time management and leadership skills to produce innovative solutions. Students will use current technology to design, create, program and test robots, animations and game applications to respond to their commands, overcome obstacles, and complete set challenges. They will build on their understanding of electrical and mechanical scientific concepts, while computing accurate solutions using mathematics. They will practice creative thinking, with analytical and problem solving skills to engineer solutions to real world problems.

Select groups will participate in the State Robocup Junior and First Lego League competitions using our LEGO Mindstorms NXT robots, with the possibility to compete on a National level. They will also be building and testing solar vehicles, sponsored by the STELR Program, an initiative of the Australian Academy of Technology and Engineering, and the Australian Power Institute.

The course aims to build on students' interest in STEM and highlights the widening range of education pathways and career opportunities in these fields. Many industries are becoming more focussed on innovation and creativity, which will be fostered in this course. There will be exposure to industry and university experts who will present the latest technologies to the students. This course exposes them to computer science, engineering and ICT career pathways.

### **CHEFS JUST FOR YOU - 9CJY**

Become a Chef or just learn to create food that others will love to eat. The choice is yours. This course is designed to give students an opportunity to see and experience food creation from the perspective of the food and catering industry with an emphasis on final presentation. There is a high practical content, with a focus on restaurant and "café style" food. Students will also learn about menu planning, incorporating a variety of different cuisines to meet individual needs in a variety of situations. Students will be exposed to and will prepare a wide range of dishes representative of different countries and gain a better appreciation of various cultures.

*Please note: This course has a high practical food content and carries associated high costs.*

### **FABRIC CREATIONS - 9FC**

During this course, students will explore various textile styles and influences to discover their own personal flair and create work inspired through self-expression. Students will gain practical skills and experience in producing original designs using a variety of mediums.

Students will have the opportunity to produce their items with environmental considerations using techniques such as upcycling, machine embroidery and contemporary crafts. An excellent foundation for fashion or interior design.

*Please note: Students will be required to provide fabric for personal items during this course.*



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