# MOUNTAIN CREEK State High School



# 2024 - YEAR 9 SUBJECT SELECTION HANDBOOK

# Contents

YEAR 9 SUBJECT SUMMARY	1
CORE SUBJECTS	2
English	2
Health and Physical Education	3
Humanities	4
Mathematics	5
Science	6
ENGLISH	7
Media Arts	7
BUSINESS STUDIES	8
Economics & Business	8
CREATIVE INDUSTRIES	9
Music	9
Drama	10
Dance	11
Visual Arts	12
DIGITAL INNOVATION	13
Digital Technologies - Programming	13
Digital Technologies – Robotics / Drones	14
Digital Technologies – AI & Immersive Reality (VR/AR)	15
STEM with Innovation	16
DESIGN AND TECHNOLOGIES	18
Design Concepts	18
Materials &Technologies Specialisations	19
Engineering Concepts	20
HEALTH AND PHYSICAL EDUCATION	21
Rugby League Development Program	21
Volleyball	22
Basketball	23
Physical Education	24
AFL	25
Netball	26
LIFESTYLE INDUSTRIES	27
Food & Fibre Production	27
LANGUAGE	28
Spanish	28
Japanese	29

# Student Resource Scheme (SRS)

#### Includes:

School Diary, hat (on enrolment) and ID Card

Student and subject resources where the core curriculum is extended through provision of practical learning experiences and materials eg. Art and craft supplies, cooking materials, Manual Arts materials, Junior HPE.

Textbooks (hard copy, digital or E-Book, Student reference material for hire / purchase (eg. Books, audio / video, software, site licences, consumables, photocopying, use of equipment).



#### **Subject Fees**

Subject fees for additional resources not covered by SRS eg. Materials to make items and take home, use of specialised equipment, subject specific activities and consumables.

Also includes items students keep eg. Training T-Shirts for Sporting Excellence Programs, aprons for Hospitality etc.



#### User Pays

These fees are paid to a third-party provider, and will be charged as the activity occurs throughout the year.

Charges for excursions and activities, transport and admission costs, Teacher relief (if applicable) eg. Sport and Enrichment activities, Guest speakers, Arts Council etc.

Core Subjects	Subject Type	Subject Fee	User Pay Fee
English	Core	Nil	Nil
Health and Physical Education	Core	Nil	Nil
Humanities & Social Sciences	Core	Nil	\$10
Mathematics	Core	Nil	Nil
Science	Core	Nil	Nil
English Subjects	Subject Type	Subject Fee	User Pay Fee
Media Arts	Elective	Nil	Nil
Business Studies Subjects	Subject Type	Subject Fee	User Pay Fee
Economics & Business	Elective	Nil	Nil
Creative Industries Subjects	Subject Type	Subject Fee	User Pay Fee
Music	Elective	Nil	\$25
Drama Drama	Elective	\$20	\$25
Dance	Elective	\$20	Nil
∕isual Arts	Elective	\$30	\$25
Digital Innovation Subjects	Subject Type	Subject Fee	User Pay Fee
Digital Technologies - Programming	Elective	\$40	Nil
Digital Technologies - Robotics/Drones	Elective	Nil	Nil
Digital Technologies – Al & Immersive Reality	Elective	\$20	Nil
STEM with Innovation	By application Only	Nil	Nil
		•	•
Design and Technologies Subjects	Subject Type	Subject Fee	User Pay Fee
Design Concepts	Elective	\$15	Nil
Materials &Technologies Specialisations	Elective	\$40	Nil
Engineering Concepts	Elective	\$30	Nil
Health and Physical Education Subjects	Subject Type	Subject Fee	User Pay Fee
Physical Education	Elective	Nil	Nil
Physical Education - AFL	Elective	\$65	Nil
Physical Education - Basketball	Elective	\$65	Nil
Physical Education - Netball	Elective	\$60	Nil
Physical Education - Volleyball	Elective	\$50	Nil
Rugby League Development Program	By invitation only	\$90	Travel TBA
_ifestyle Industries Subjects	Subject Type	Subject Fee	User Pay Fee
Food & Fibre Production	Elective	\$15	Nil
_anguage Subjects	Subject Type	Subject Fee	User Pay Fee
Spanish	Elective	Nil	Nil
<del>Jpanion</del>			

	CORE SUBJECTS
Subject name	English
Subject code	ENG
Subject Fee	Nil
User pays fee	Nil
Prerequisites	This is a mandatory subject which will be studied by all Year 9 students
Course overview	English, the study of language, literature and literacy, is fundamental to the school curriculum. It is the means of expression and communication through which we conduct the business of life - personal, educational, social and vocational. All students in the Junior School take the Junior English Program.
Course outline	<ul> <li>Morphed Myths</li> <li>Speculative Fiction</li> <li>One-Act Plays</li> <li>Novel study</li> </ul>
Assessment	<ul> <li>Students are assessed during and at the completion of each unit</li> <li>A variety of test instruments is used including in-class tests, orals, and written assignments</li> <li>Students know at the beginning of each unit how the unit is to be assessed, its purpose and conditions</li> </ul>

Subject name	Health and Physical Education
Subject code	HPE
Subject fee	Nil
User pays fee	Nil
Prerequisites	All Year 9 students will study a HPE subject.
Course overview	Health & Physical Education reflects the dynamic and multi-dimensional nature of health and recognises the significance of physical activity in the lives of individuals and groups within the Australian Society.
	Benefits include personal and social growth through an emphasis on participation, cooperation and goal setting in a physically active environment.
	The Year 9 Health & Physical Education Program prepares students for the following courses of study:
	<ul> <li>Year 10 - Physical Education</li> <li>Year 11 &amp; 12 - Senior Physical Education</li> <li>Year 11 &amp; 12 - Senior Recreation</li> <li>Year 11 &amp; 12 - Certificate III in Fitness</li> </ul>
	The Health & Physical Education program encourages young people to:
	<ul> <li>lead an active and healthy life</li> <li>gain knowledge and skills that will allow them to make informed health choices</li> <li>make appropriate use of their leisure time</li> <li>develop their intellectual, social and physical well-being</li> </ul>
Course outline	In HPE students complete both theory and practical activities in the health and sporting field. They study a number of different topics related to health and physical activity that aim at improving their knowledge of how to stay fit and healthy throughout their life.
	In 2023 Mountain Creek SHS continues to embed the Australian National Curriculum in Health & Physical Education. This course is divided into six sub strands. These are:
	<ol> <li>Being healthy, safe and active</li> <li>Communication and interacting for health and wellbeing</li> <li>Contributing to healthy and active communities</li> <li>Moving our body</li> <li>Understanding movement</li> <li>Learning through movement</li> </ol>
	There are ten main focus areas that may be covered in Year 9. These are:
	<ol> <li>Alcohol and other drugs</li> <li>Food and nutrition</li> <li>Health benefits of physical activity</li> <li>Mental health and well-being</li> <li>Relationships and sexuality</li> <li>Safety</li> <li>Challenge and adventure activities</li> <li>Games and sports</li> <li>Lifelong physical activities</li> <li>Rhythmic and expressive movement activities</li> </ol>
Assessment	Students will be assessed according to set criteria and standards involving both theoretical and practical components of the course. This will include participation, improvement, skill learning and execution along with the use of tactics and strategies in authentic performance activities. Written aspects of the course will include assessment through folios, written reports and assignments, examinations, completion of class work and multimodal tasks.

## Subject Selection Handbook - 2023 Year 9

Subject name	Humanities
Subject code	НИМ
Subject fee	Nil
User pays fee	\$10
Prerequisites	This is a mandatory subject which will be studied by all Year 9 students
Course overview	The study of the Social Sciences is not only a prerequisite for the senior humanities subjects, but has been mandated by the Federal Government (ACARA - Australian Curriculum, Assessment and Reporting Authority). The subject combines elements students would learn in a traditional History and Geography course, with an emphasis on Australia, Asia and other global issues.
	At Mountain Creek State High School an emphasis is placed on equipping students for studies in the future by providing the opportunity to make students "Life Long Learners". The History & Geography Curriculum allows students to explore their social, natural and cultural world in order to develop a sound general knowledge basis.
Course outline	<ul> <li>One Semester History</li> <li>Historical Study: Industrial Revolution</li> <li>Historical Study: World War One - The Australian Experience</li> <li>One Semester Geography</li> <li>Biomes &amp; Food Securities</li> <li>Geographies of Interconnections</li> </ul>
Assessment	Assessment in the Social Sciences is continuous, using a variety of assessment items to evaluate student performance using a range of skills.  The type of assessments that may be utilised are:  Exams Research projects Practical exercises Presentations

Subject name	Mathematics
Subject code	MAT
Subject fee	Nil
User pays fee	Nil
Prerequisites	This is a mandatory subject which will be studied by all Year 9 students
Course overview	Mathematics in the Australian Curriculum provides clear links between the strands of mathematics and emphasises embedding the skills.
Course outline	The topics covered in this course include, but are not limited to:  Pythagoras' theorem direct proportion analytical geometry algebra perform algebraic expansions, including binomials linear and non-linear relationships statistics trigonometry probability
Assessment	Students will be assessed according to the ACARA8.5 standards for Year 9. Students will be assessed by a combination of formal exams and investigations.

Subject name	Science
Subject code	SCI
Subject fee	Nil
User pays fee	Nil
Prerequisites	This is a mandatory subject which will be studied by all Year 9 students
Course overview	Science provides opportunities for students to develop an understanding of important science concepts and processes, the practices used to develop scientific knowledge, science's contribution to our culture and society, and its applications in our lives. The curriculum supports students to develop the scientific knowledge, understandings and skills to make informed decisions about local, national and global issues and to participate, if they so wish, in science-related careers
Course outline	Science has three interrelated strands: Science Understanding, Science as a Human Endeavour and Science Inquiry Skills.  Together, the three stands of the science curriculum provide students with understanding, knowledge and skills through which they can develop a scientific view of the world. Students are challenged to explore science, its concepts, nature and uses through clearly described inquiry processes.  The four areas that are studied throughout Year 9 include:  Biological Sciences - the biological sciences sub-strand is concerned with understanding living things.  Chemical Sciences - the chemical sciences sub-strand is concerned with composition and behaviour of substances.  Physical Sciences - the physical sciences sub-strand is concerned with understanding the nature of forces and motion, and matter and energy.  Earth and Space Sciences - the earth and space sciences sub-strand is concerned with Earth's dynamic structure and its place in the cosmos.
Assessment	<ul> <li>A range of assessment techniques will be utilised throughout the course including:</li> <li>Exams</li> <li>Practical investigations</li> <li>Assignments</li> </ul>

## Subject Selection Handbook - 2023 Year 9

Faculty	ENGLISH
Subject name	Media Arts
Subject type	Elective Subject
Subject fee	Nil
User pays fee	Nil
Prerequisites	
Course overview	Have you ever wanted to edit your own films for YouTube? Want to learn about special effects and the way films take us to a world of fantasy? Are you interested in learning how to use the tools of the film and television industry? Do you see yourself as a cinematographer, director, editor or sound technician? Or, do you just have a fascination with the way moving images are used to create powerful statements?  If you are interested in any of this or would like to be involved in <i>Creek Week</i> ; our in-school news program, then this is the subject for you!  Media Arts is a wide-ranging, creative, technical and hands-on subject that opens the doors to many pathways, including the study of Film, Television and New Media in the Senior School.
Course outline	This is a ONE SEMESTER course.  Students will make and respond to the moving image with a focus on creating productions for the whole school community and beyond.
Assessment	Assessment will include designing, producing and responding to the moving image.

Faculty	BUSINESS STUDIES
Subject name	Economics & Business
Subject code	ECB
Subject type	Elective Subject
Subject fee	Nil
User pays fee	Nil
Course overview	<ul> <li>Unit 1</li> <li>Managing financial responsibilities risks and rewards.</li> <li>What strategies can be used to manage financial risks and rewards?</li> <li>Develop and apply knowledge exploring strategies for mitigating financial risks, how to manage over-indebtedness using cost-benefit analysis to recommend and justify a course of action.</li> <li>Unit 2</li> <li>Competition in the Global Economy</li> <li>How do participants in the global economy interact?</li> <li>How does creating and competitive advantages benefit business?</li> <li>Develop and apply enterprising behaviours and capabilities to investigate business issues (regional and global)</li> <li>Seeking a competitive advantage in the global economy</li> <li>Examine the role of Transnational Corporations and their strategies for competitive advantage.</li> </ul>
Assessment	<ul> <li>Two assignments</li> <li>Participate in the ESSI money stimulation</li> <li>Participation in the ASX school share market competition</li> </ul>

Faculty	CREATIVE INDUSTRIES
Subject name	Music
Subject code	MUS
Subject type	Elective Subject
Subject fee	Nil
User pays fee	\$25
Course overview	Music is uniquely an aural art form. Music exists distinctively in every culture and is a basic expression of human experience. It has the capacity to engage inspire and enrich all students.
	Within this course you will:
	<ul> <li>Develop your skills as an instrumentalist and vocalist</li> <li>Develop musical literacy</li> <li>Develop your aural skills</li> <li>Experience a range of musical genres and work with the literature of music up to the</li> </ul>
	present day
	This course will prepare you for Senior Music, analysing a foundation of musical knowledge in the areas of listening, responding, composing and performing. The music industry is expanding and providing more options for future employment within the Creative Industries.
	Entertainment/Performance: Vocalist, Instrumentalist, Orchestral Performer, Instrumental/Vocal Conductor, Dancer, Disc Jockey, Program Director/Arranger (radio/television), Composer.
	Education: Classroom or instrumental music teacher, Private Instrumental or Vocal Teacher, Drama Teacher, Music School Administrator, Arts Administrator.
	Business: Instrument Maker/Repairer, Music Librarian, Music Copyist, Music Publisher, Music Director (Theatre), Music Critic, Sound Designer, Sound Technician, Music Sales, Media Representative.
	Student will have the opportunity to attend workshops and live music performance organized by the Creative Industries Faculty. These additional activities will attract a user pays fee.
Course outline	This is a ONE SEMESTER course.
	Students will make and respond to music, exploring meaning and interpretation, forms and elements and various contexts of musical works.
	Unit One: Now Showing!
	Students will explore the ways that music is used in film to fulfill a range of purposes – to enhance or create setting, character, emotion, mood/atmosphere and action. Film repertoire will be analysed from a range of genres and cultures.
	Unit Two: Centre Stage
	Students will develop their skills in performance on their chosen instrument and perform a piece of music to the class
Assessment	Students will be assessed in the interrelated strands of Making and Responding:
	<ul> <li>Making – composing, arranging, rehearsing, performing music</li> <li>Responding -listening, reflecting, analysing and evaluating their own and other's musical works.</li> </ul>

# Subject Selection Handbook – 2023 Year 9

Subject name	Drama	
Subject code	DRA	
Subject type	Elective Subject	
Subject fee	\$20	
User pays fee	\$25	
Course overview	various aspects of drama. As the opportunity to gain an u	ers students a basic practical and theoretical introduction to well as building confidence, this course aims to give students inderstanding and appreciation of creating, performing and will also gain an insight into employment options and ve Industries.
		erforming drama gives students opportunities to develop skills egotiating, problem-solving and decision-making.
		s share their work with others, learn about the importance of unication and in doing so develop self-confidence and
		nity to attend workshops and live performance organized by y. These additional activities will attract a user pays fee.
	This is a ONE SEMESTER course.	
Course outline	This is a ONE SEMESTER c	ourse.
Course outline		nd to drama, exploring meaning and interpretation, forms and
Course outline	Students will make and respon	nd to drama, exploring meaning and interpretation, forms and
Course outline	Students will make and responselements and various contexts Unit One: The Artist Adapts	nd to drama, exploring meaning and interpretation, forms and
Course outline	Students will make and responsive elements and various contexts.  Unit One: The Artist Adapts.  Students make (perform) and Theatre.  Unit Two: The Artist Embellish	nd to drama, exploring meaning and interpretation, forms and s of drama.  Trespond to Drama, exploring genres of Realism and Hybrid nes
Course outline	Students will make and responsive elements and various contexts.  Unit One: The Artist Adapts.  Students make (perform) and Theatre.  Unit Two: The Artist Embellish	nd to drama, exploring meaning and interpretation, forms and is of drama.  Trespond to Drama, exploring genres of Realism and Hybrid
Course outline  Assessment	Students will make and responsive elements and various contexts. Unit One: The Artist Adapts. Students make (perform) and Theatre. Unit Two: The Artist Embellish Students explore the genre of	nd to drama, exploring meaning and interpretation, forms and s of drama.  Trespond to Drama, exploring genres of Realism and Hybrid nes
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	Students will make and responselements and various contexts. Unit One: The Artist Adapts Students make (perform) and Theatre. Unit Two: The Artist Embellish Students explore the genre of Students will be assessed in the Making  Making: Forming	nd to drama, exploring meaning and interpretation, forms and is of drama.  I respond to Drama, exploring genres of Realism and Hybrid mes  Melodrama to form and perform a melodramatic script.  The interrelated strands of Making and Responding:  Improvising, devising, scripting, rehearsing, presenting and performing drama.  Sustaining roles and characters, voice and movement.
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Subject name	Dance
Subject code	DAN
Subject type	Elective Subject
Subject fee	\$20
User pays fee	Nil
Course overview	Dance gives students another means of communicating and responding to the world around them while providing opportunities for social and personal well-being.
	The Dance classroom is a dynamic environment where students come to appreciate and understand many different facets of Dance through practical and theory-based activities. Students will create movement vocabulary for dance compositions, express themselves through movement, and investigate the historical and cultural development of dance. The Junior Dance program places an emphasis on group work and student centred learning which allows the students to develop their own unique creativity.
	As one of the Creative Industries - Dance builds thinking skills such as analysis, synthesis, evaluation and critical judgement. It nourishes imagination and creativity, develops collaborative and teamwork skills, flexible thinking and an appreciation for diversity. These are the very skills in demand in the modern workforce.
	Dance can also lead to a number of employment opportunities directly related to the Creative Industries such as choreographer, dancer, entertainer, and teacher. The study of Dance is enriched by experiences in Choreography, Appreciation and Performance. Students Learn:
	<ul> <li>How to create dance manipulating space, movement, dynamic and form</li> <li>Body awareness</li> <li>How to critique dance</li> <li>To develop their performance skills in a variety of genre's</li> <li>To develop an understanding and appreciation of dance</li> </ul>
	Junior Dance is a vital stepping stone in preparing the students for the Senior Dance syllabus.
	Student may have the opportunity to attend workshops and live dance performance organized by the Creative Industries Faculty. These additional activities will attract a user pays fee.
Course outline	This is a ONE SEMESTER course.
	Students will make and respond to dance, exploring meaning and interpretation, forms and elements and various contexts of dance.
	Unit One: Fusion
	Students have the opportunity to work with a hip hop/cultural dance artist to develop their technical skills and confidence in that genre. Students perform and respond to dance works.
	Unit Two: Free to Move
	Students have the opportunity to develop their technical skills and understanding in the genre of contemporary dance. Students perform, choreograph and respond to contemporary dance works.
Assessment	Students will be assessed in the interrelated strands of Making and Responding:
	<ul> <li>Making Choreographing, rehearsing and performing dance.</li> <li>Responding Appreciation of their own and other's dance works.</li> </ul>

Subject name	Visual Arts
Subject code	ART
Subject type	Elective Subject
Subject fee	\$30
User pays fee	\$25
Course overview	Visual Arts includes the fields of art, craft and design. Learning in and through these fields, students develop perceptual and conceptual understanding, critical reasoning and practical skills.  Art should be seen as an important part of the development of all students. Art and design are not taught solely for the purpose of producing artists or designers. In the same way, studying mathematics does not make you a mathematician. Studying art and design makes you more aware of your surroundings, equips you to appreciate your own work and the work of others, and improves the quality of your perception.  The study of Art may lead to a number of Creative Industries careers, including; architecture, teaching, film and television, fashion, industrial design, advertising, marketing and digital based design. Studying Visual Art develops student's ability to think critically and creatively. The Subject Fee is used to purchase consumable art equipment used directly by the student, students will take home artworks they have made during the course.
Course outline	This is a ONE SEMESTER course.  Students make and respond to visual artworks, using historical and conceptual explanations to critically reflect on the contribution of visual art practitioners. They explore various contexts of visual artworks.  Unit One: Australian Natural Environment  Students study the media area of ceramics, and explore the process of stylising and abstracting natural forms found within our natural environment.  Unit Two: National Identity  Students study media areas of drawing and printmaking to explore representations of people and national identity.
Assessment	Students will be assessed in the interrelated strands of Making and Responding:  Making  Knowledge, understanding and skills in creating  two dimensional (2D) and three dimensional  (3D) artworks.  Responding  View, reflect, analyse and evaluate their own and other's visual artworks.

Faculty	DIGITAL INNOVATION
Subject name	Digital Technologies - Programming
Subject code	DTP
Subject type	Elective Subject
Subject fee	\$40
User pays fee	Nil
Course overview	This subject is an introduction to the Python language. Python is a general-purpose language, which means it can be used to build just about anything. Python is great for backend web development, data analysis, artificial intelligence, and scientific computing. The course assumes students have no prior knowledge of Python programming.
	The skills developed in this course are not just for a career as a programmer, but also are directly used in the following industries: health, teaching, graphic design, creative art displays and all the sciences
	This course may begin with Python graphics, and progresses to students developing a chatbot, or similar task. The final project task may also be submitted to the Premier's Coding Competition, and there may be opportunity to participate in the cybersecurity-based CyberTaipan competition (free) run by AustCyber. NOTE: Cybersecurity is the number one expected area for employment growth in the IT community within Australia.
	Digital Technologies – 1 Semester Either Year 7 or Year 8
	Programming Year 9  Robotics/Drones Year 9  Artificial Intelligence + Immersive Reality (VR + AR) Year 9
	Programming Year 10  Robotics/Drones + Immersive Reality (VR + AR) Year 10  Digital Solutions General Year 11/12  Certificate 3 in Info Tech including Dell Technician and Entrepreneurship Year 11/12  ICT Applied Year 11/12
Course outline	This is a ONE SEMESTER course. Units may include:
	<ul> <li>Python graphics</li> <li>Developing a chatbot</li> <li>Solution to a real world problem</li> </ul>
Assessment	Students will be assessed through class activities, projects and exam.

Subject name	Digital Technologies – Robotics / Drones
Subject code	DTD
Subject type	Elective Subject
Subject fee	Nil
User pays fee	Nil
Course overview	Students will undertake a series of tasks to design, build, program and compete in robotic and drone challenges. The objective of this course is to introduce the student to 21st century problem solving strategies in both robotics and drones, and provides for the following pathways:    Digital Technologies
Course outline	This is a ONE SEMESTER course. Units include:  Explore the broad scope of robotic and drone applications  Develop robot construction skills  Learn to program robots and drones  The role of robots / drones in society, now and in the future.
Assessment	Students are required to document their learning through the use of class notebooks, design documentation and the resultant products. Collectively they contribute to the assessment for the subject.

Subject name	Digital Technologies – AI & Immersive Reality (VR/AR)
Subject code	DTI
Subject type	Elective Subject
Subject fee	\$20
User pays fee	Nil
Course overview	Students will consider the Artificial Intelligence (AI) technologies that they encounter in everyday life. These AI technologies can provide a great basis for discussing and investigating how digital technologies meet common personal, school or community needs. Virtual Reality/Augmented Reality (VR/AR) is a wide-ranging, creative and hands-on unit that opens the doors for artists, designers and other creatives to many pathways involving the digital tools of the future, including those shown below to year 12:  The AI and Immersive Reality skills developed in this course are not just for a career as a VR/AR designer, but also are directly used in the following industries: health (e.g. alzheimer patent care, cancer detection), teaching, training, emergency services and all the sciences. Immersive Reality incorporates Virtual and Augmented Reality. Students will cover the spectrum of VR/AR from simple, digital overlays through to fully immersive digital experiences. Students should have a sound understanding of Maths and Digital Technologies. Students will actively participate in the Immersive Reality Technologies. Students will actively participate in the Immersive Reality Technologies. Digital Technologies and the Immersive Reality Technologies and Technologies. The Technologies and Technologies and Technologies. The Technologies are the Technologies. The Technologies and Technologies. The Technologies are the Technologies and Technologies. The Technologies are the Technologies a
Course outline	<ul> <li>This is a ONE SEMESTER course. Units include:</li> <li>Virtual Reality</li> <li>Augmented Reality</li> <li>Impact on society and employment, now and in the future.</li> </ul>
Assessment	Assessment will include designing, producing and responding to VR/AR creations.

Subject name	STEM with Innovation
Subject code	STM
Subject type	Elective Subject (this is an exclusive access course for STEM Academy students only. Application form available from Admin office and the school website.)
Subject Fee	Nil
User pays fee	Nil
Course overview	Tech startups exist in any industry in which technology is an enabler of growth, including engineering, biotech, pharmaceuticals, energy, health, education, agriculture, technology hardware and software. (Crossroads Report)  As new technologies transform the world around us faster than ever, entrepreneurship is becoming an essential skill for the 21st Century. The STEM with Innovation elective subject will extend students' knowledge of a Science topic, introduce an emerging technology and teach entrepreneurial skills to solve problems, develop products for society, and apply this
	newly acquired knowledge to solve genuine problems in wider society that students identify.  Design Thinking methodology plays a significant role in this course.
Course outline	This unit extends on the introductory concepts covered in year 7 and 8, and increases the focus on identifying real-world problems and pitching their solutions. Expert coaches become more heavily involved including in the technology section.  Academically talented students will be provided an opportunity to experience development
	of ideas with engaging technologies, pushing their understanding and application of STEM.
	In this course students are extended into more sophisticated iteration of the lean start-up process, and additionally are provided with opportunities to compete against other teams, sometimes within the class and sometimes from other schools, to further develop and refine their lean start-up understanding through to delivery of final pitches. This process is explicitly designed to develop students understanding of how they can use the knowledge they have developed to solve real-world, actual problems being experienced in society. The strands will be offered based on availability but may include:
	<ul> <li>Drones</li> <li>Artificial Intelligence and Machine Learning</li> <li>Wearable technology</li> <li>Augmented/Virtual Reality (AR/VR)</li> <li>App-based software product</li> </ul>
	The elective is designed to cater for academically capable students who demonstrate creative flair and/or problem-solving skills and are keen to investigate how combining their excellent STEM knowledge with entrepreneurship could see their ideas become a part of everyday use in society.
	Additionally, students will compete in the Sunshine Coast Council's Mayor's Innovation Award.
Assessment	Students will be assessed on an initial folio of work as well the quality of their final product and delivery. Also assessed will be students' 21st Century skills such as teamwork, problem-solving, collaboration and engagement.



#### STEM ACADEMY (STEM = Science/Technology/Engineering/Maths)

The STEM Academy is a competitive entry program based on demonstrated engagement and proficiency in a technology (robotics, coding, etc.) and one of Maths, Science or Engineering

STEM is a curriculum based on educating students in four specific disciplines — science, technology, engineering and mathematics — in an interdisciplinary and applied approach. Rather than teach the four disciplines as separate and discrete subjects, the STEM Academy integrates them into a cohesive learning paradigm based on real-world applications

Many jobs require STEM skills at basic levels to problem solve, understand and apply innovations. There is more technology in how we work than at any other time as businesses are adopting new and emerging technologies to remain competitive.

#### Courses offered in the STEM Academy combine:

- Extending Science, Maths and Engineering knowledge
- Introducing new Technology, such as mobile app development or sensor-based wearables
- Lean Startup knowledge and processes
- Solving real-world problems that students identify using this new STEM knowledge

Acceptance in to the program is by application with applicants required to demonstrate at school, or in some extra-curricular activities and/or competitions, or in some other equivalent way, evidence of achievement in both:

- Technology (including coding/programming, robotics, Arduinos, wearable technologies, or other similar application)
- One of Science, Maths, Engineering and / or other STEM-related field

Additionally, applicants will also have a demonstrated track record of working independently and working effectively as part of a team. There is expected to be opportunities to collaborate with the University of the Sunshine Coast within the course.

The STEM Academy program is characterised by accelerated learning in the STEM with Innovation subject. There is an expectation student will achieve an A or B in STEM with Innovation. Students are encouraged to study their chosen STEM subjects in greater depth and will involve themselves in extension activities, including competitions, before/after school extra-curricular activities, as they are provided.

In addition to developing rigorous study skills and a real capacity to perform academically, successful applicants will demonstrate leadership and engagement in developing their team projects within the STEM with Innovation elective.

Acceptance into the STEM Academy Program:

- Please complete a STEM application form, available on the school's website <a href="www.mountaincreekshs.eq.edu.au">www.mountaincreekshs.eq.edu.au</a> or from our Administration office. Please refer to page 6 for due dates of applications.
- Successful and unsuccessful students will be notified in Term 4.
- Once admitted to the STEM Academy at any year level, student DO NOT need to reapply in subsequent years.
- Please contact Graeme Breen (Head of Digital Innovation) at <a href="mailto:gbree3@eq.edu.au">gbree3@eq.edu.au</a> to discuss the STEM Academy Program.

Faculty	DESIGN AND TECHNOLOGIES
Subject name	Design Concepts
Subject code	DES
Subject type	Elective Subject
Subject fee	\$15 (subject specific materials)
User pays fee	Nil
Course overview	Design Concepts provides opportunities for students to develop skills that will allow them to respond to a broad range of design genre. The subject explores the elements, principles, process models, ethics, tools and communication systems used in the design world. It combines sketching, rendering, modelling and media used to communicate design concepts to a variety of audiences. Aimed at students wishing to pursue careers in engineering, architecture, landscape architecture, interior design, fashion design, marine architecture, graphic design and industrial design. This subject prepares students for the new senior subject Design.
Course outline	<ul> <li>This is a ONE SEMESTER course. Units include:</li> <li>Freehand Sketching (Term 1)</li> <li>Rendering (Term 1)</li> <li>2D CAD (Term 1)</li> <li>Landscape Design Small Courtyard/Vegetable Garden (Term 1/2)</li> <li>Interior Design – Study Nook/Wardrobe (Term 1/2)</li> <li>Graphic Design - Magazine Cover/Stamp (Term 1/2)</li> <li>Architectural Design – Dog Kennel/Tent (Term 1/2)</li> <li>Industrial Design – Watch/Lampshade (Term 1/2)</li> <li>Fashion Design - Flat Ring, Beanie/Cap (Term 1/2)</li> <li>Digital Design – App Icon/Screen Background Art (Term 1/2)</li> <li>Modelling – foam/cardboard (Term 1/2)</li> </ul>
Assessment	<ul> <li>A range of assessment techniques will be utilised throughout the course including:</li> <li>Class work activities</li> <li>Homework activities</li> <li>Design folios</li> <li>Knowledge/Skill tests</li> </ul>

Subject name	Materials &Technologies Specialisations
Subject code	TMT
Subject type	Elective Subject
Subject fee	\$40 (subject specific materials)
User pays fee	Nil
Prerequisites	Safe behaviour history
Course overview	Materials &Technologies Specialisations provides students with opportunities to develop skills related to the manufacturing industry. The students develop an understanding of different tools, materials and processes through the construction of three boxes. The students develop understanding in the use of the metal lathe and wood lathe to create projects to specified dimensions. The students are required to maintain a record of each project, the equipment used and the steps of production in their notebooks. In Year 10 the skill development opportunities are expanded.  The subject is useful for general skill development or preparation for the Vocational Education and Training (VET) courses offered in Year 10, 11 and 12. Subject costs cover materials used in project work.
Course outline	<ul> <li>This is a ONE SEMESTER course. Units typically include:</li> <li>Workshop safety</li> <li>Pencil Box – sheet metal</li> <li>Trinket Box - acrylic</li> <li>Card Box - wood</li> <li>Junior Hacksaw</li> <li>Fishing Reel – Wood Lathe n</li> <li>Sanding Block</li> </ul>
Assessment	A range of assessment techniques will be utilised throughout the course including:  • Project notes • Theory tests • Project outcomes • Homework activities

Subject name	Engineering Concepts
Subject code	EGC
Subject type	Elective Subject
Subject fee	\$30 (subject specific materials)
User pays fee	Nil
Course overview	Engineering Concepts introduces students to basic principles of electronics, mechanics, robotics, control systems and structures. The skills extend into the industry fields of civil, architectural, mechanical and industrial engineering, industrial design, aeronautics and electronics. The students develop an understanding of components, mathematical formulas and organisation of elements that create successful engineered products. Students demonstrate their learning through the design, documentation and construction of projects. Studies in the subject will complement work learnt in science and maths. Subject costs cover materials used in project work. The subject provides a good foundation for the new senior subject Engineering.
Course outline	<ul> <li>This is a ONE SEMESTER course. Units typically include:</li> <li>Classroom Safety (Term 1)</li> <li>Engineering Principles - Frames (Term 1)</li> <li>Matchstick Tower (Term 1)</li> <li>Principles of Electronics (Term 2)</li> <li>Wheels, Axles, Pulleys, Friction (Term 2)</li> <li>Mousetrap Racer (Term 2)</li> </ul>
Assessment	A range of assessment techniques will be utilised throughout the course including:  Class notes Practical assessment Theory test Folio of work Homework

Faculty	HEALTH AND PHYSICAL EDUCATION
Subject name	Rugby League Development Program
Subject code	RLP
Subject type	By Invitation Only
Subject fee	\$90
User pays fee	Travel TBA
Course overview	This is a specialist class designed to complement the Rugby League Development Program that students have been invited to participate in. It is a program, that enhances the skill level of rugby league activities in a highly positive and supportive environment. It allows students the opportunity to participate in a vast array of rugby league experiences, while best preparing them for their senior studies.
	The course emphasises the interrelatedness of learning in, about and through physical activity. Rugby League takes an information processing approach to learning. Rugby League is the physical activity that takes the central focus in the learning experiences, acting as both a source of content and a medium for learning.
	Benefits include personal and social growth through an emphasis on participation, cooperation and goal setting in a physically active environment.
	The Year 9 Rugby League Program prepares students for the following courses of study:
	<ul> <li>Year 10, 11 &amp; 12 - Rugby League Development Program</li> <li>Year 11 &amp; 12 - Senior Physical Education</li> <li>Year 11 &amp; 12 - Certificate III in Fitness</li> </ul>
Course outline	This is a FULL YEAR course. Therefore, it replaces TWO of the ONE SEMESTER electives.
	The subject matter integrated into the Rugby League practical components is organised around the following focus areas:
	<ul> <li>Pre-season Preparation (Term 1/2)</li> <li>Fitness Principles &amp; Skill Development (Term 1/2)</li> <li>Trial Games Competition Preparation (Term 1/2)</li> <li>Broncos Cup Competition (Term 1/2)</li> <li>Competition Preparation (Term 3/4)</li> <li>Broncos Cup Competition Off Season Training (Term 3/4)</li> <li>Weight Training &amp; Nutrition (Term 3/4)</li> </ul>
Assessment	Assessment will include practical assessment in addition to a range of written tasks

Subject name	Volleyball
Subject code	VOL
Subject type	Elective Subject
Subject fee	\$50 (equipment and shirt)
User pays fee	Nil
Course overview	The course emphasises the interrelatedness of learning in, about and through physical activity. Volleyball takes an information processing approach to learning. Volleyball is the physical activity that takes the central focus in the learning experiences, acting as both a source of content and a medium for learning.  Benefits include personal and social growth through an emphasis on participation, cooperation and goal setting in a physically active environment.  The Year 9 Volleyball Program prepares students for the following courses of study:
	<ul> <li>Year 10 - Volleyball</li> <li>Year 11 &amp; 12 - Senior Physical Education</li> <li>Year 11 &amp; 12 - Certificate III in Fitness</li> </ul>
Course outline	<ul> <li>This is a full year course. Therefore, it replaces TWO of the ONE SEMESTER electives.</li> <li>Practical - Basic Skill Development; Theory - Biomechanics of Volleyball (Term 1)</li> <li>Practical - Skills for Play; Theory - Exercise Science (Term 2)</li> <li>Practical -Volleyball Systems; Theory - Training Programs (Term 3)</li> <li>Practical - Skills for Competition; Theory - Referee's Course (Term 4)</li> </ul>
Assessment	Assessment will include practical assessment in addition to a range of formal written assignments and exams

Subject name	Basketball
Subject code	BAL
Subject type	Elective Subject
Subject fee	\$65 (training shirt, subject specific equipment and fitness training)
User pays fee	Nil
Course overview	The course emphasises the interrelatedness of learning in, about and through physical activity. Basketball takes an information processing approach to learning. Basketball is the physical activity that takes the central focus in the learning experiences, acting as both a source of content and a medium for learning.
	This is a specialist class designed to complement the Creeker Basketball Program. You should consider studying Basketball if you have represented the school, club or district in Basketball or if you would like, to further develop your skills in this sport.
	Benefits include personal and social growth through an emphasis on participation, co- operation and goal setting in a physically active environment.
	The Year 9 Basketball Program prepares students for the following courses of study:
	<ul> <li>Year 10 - Basketball</li> <li>Year 11 &amp; 12 - Senior Physical Education</li> <li>Year 11 &amp; 12 - Certificate III in Fitness</li> </ul>
Course outline	This is a ONE SEMESTER course. Units include:
	<ul> <li>Practical- Basic Skill Development; Theory -Goal Setting/Functional Anatomy &amp; Biomechanics (Term 1)</li> <li>Practical -Skills for Game Play; Theory - Component Training &amp; Performance (Term 2)</li> </ul>
Assessment	Assessment will include practical assessment in addition to the preparation of a Sports Folio. The Sports Folio will include a variety of written tasks for each unit.

Subject name	Physical Education
Subject code	PHE
Subject type	Elective Subject
Subject fee	Nil
User pays fee	Nil
Course overview	The course emphasises the interrelatedness of learning in, about and through physical activity. The physical activities take the central focus in the learning experiences, acting as both a source of content and a medium for learning.
	Benefits include personal and social growth through an emphasis on participation, co- operation and goal setting in a physically active environment.
	The Year 9 Physical Education Program prepares students for the following courses of study:  • Year 10 - Physical Education  • Year 11 & 12 - Senior Physical Education  • Year 11 & 12 - Certificate III in Fitness
Course outline	<ul> <li>This is a ONE SEMESTER course. Units include:</li> <li>Practical Component Tennis - (Term 1)</li> <li>Theory Component Goal Setting / Functional Anatomy &amp; Biomechanics</li> <li>Assessment Sports Folio (this will include tasks such as skills test results, skill observations/analysis, checklists, journal entries/reflections, written evaluations)</li> <li>Practical Component Touch - (Term 2)</li> <li>Theory Component Training &amp; Performance</li> <li>Assessment Sports Folio (this will include tasks such as fitness test results, game observations/analysis, training performance and analysis, checklists, written evaluations, newspaper reports)</li> </ul>
Assessment	Assessment will include practical assessment in addition to the preparation of a Sports Folio. The Sports Folio will include a variety of written tasks for each unit.

Subject name	AFL
Subject code	AFL
Subject type	Elective Subject
Subject fee	\$65 (training shirt, subject specific equipment and fitness training)
User pays fee	Nil
Course overview	The course emphasises the interrelatedness of learning in, about and through physical activity. AFL takes an information processing approach to learning. AFL is the physical activity that takes the central focus in the learning experiences, acting as both a source of content and a medium for learning.
	This is a specialist class designed to complement the Creeker AFL Program. You should consider studying AFL if you have represented the school, club or district in AFL or if you would like to further develop your skills in this sport.
	Benefits include personal and social growth through an emphasis on participation, co- operation and goal setting in a physically active environment.
	The Year 9 AFL Program prepares students for the following courses of study:
	<ul> <li>Year 10 - AFL</li> <li>Year 11 &amp; 12 - Senior Physical Education</li> <li>Year 11 &amp; 12 - Certificate III in Fitness</li> </ul>
Course outline	This is a full year course. It therefore replaces TWO of the ONE SEMESTER electives.
	<ul> <li>Practical- Basic Skill Development; Theory -Goal Setting/Functional Anatomy &amp; Biomechanics (Term 1)</li> <li>Practical -Skills for Game Play; Theory – Component Training &amp; Performance (Term 2)</li> </ul>
Assessment	Assessment will include practical assessment in addition to the preparation of a Sports Folio. The Sports Folio will include a variety of written tasks for each unit.

Subject name	Netball
Subject code	NET
Subject type	Elective Subject
Subject fee	\$60 (Subject specific equipment)
User pays fee	Nil
Course overview	The course emphasises the interrelatedness of learning in, about and through physical activity. Netball takes an information processing approach to learning. Netball is the physical activity that takes the central focus in the learning experiences, acting as both a source of content and a medium for learning.
	This is a specialist class designed to complement the Creeker Netball Program. You should consider studying Netball if you have represented the school, club or district in Basketball or if you would like to further develop your skills in this sport.
	Benefits include personal and social growth through an emphasis on participation, co- operation and goal setting in a physically active environment.
	The Year 9 Netball Program prepares students for the following courses of study:
	<ul> <li>Year 10 - Netball</li> <li>Year 11 &amp; 12 - Senior Physical Education</li> <li>Year 11 &amp; 12 - Certificate III in Fitness</li> </ul>
Course outline	This is a ONE SEMESTER course. Units include:
	<ul> <li>Practical - Basic Skill Development; Theory - Goal Setting/Functional Anatomy &amp; Biomechanics (Term 1)</li> <li>Practical -Skills for Game Play; Theory - Component Training &amp; Performance (Term 2)</li> </ul>
Assessment	Assessment will include practical assessment in addition to the preparation of a Sports Folio. The Sports Folio will include a variety of written tasks for each unit.

Faculty	LIFESTYLE INDUSTRIES
Subject name	Food & Fibre Production
Subject code	TFF
Subject type	Elective Subject
Subject fee	\$15 (subject specific materials)
User pays fee	Nil
Course overview	Food & Fibre Production is a valuable course of study for all students. It offers the opportunity for students to develop good decision making skills and knowledge development in Health and Nutrition, and Textiles and Living Environments. Students develop a range of practical skills which are applicable to everyday living.
	Food & Fibre Production prepares students with Life Skills and leads into careers related to nutrition, fashion, hospitality, human relations and the built environment.
	Students will be required to provide ingredients and materials necessary for practical lessons.
Course outline	This is a ONE SEMESTER course. Units include:  Nutrition Food Production  Study of social, environmental and ecological implications for the health and well-being
	of individuals and families  Food selection for the health and well-being of individuals -focus on adolescents  Food preparation skills
	Textiles Fibre Production
	<ul> <li>Study of fibres and fabrics</li> <li>Skill development</li> <li>Garment production</li> </ul>
Assessment	<ul> <li>A range of assessment tools will be utilised. These include:</li> <li>Weekly Practical Assessment - Food</li> <li>Design Process Booklet to accompany Practical tasks – Food and Fibre</li> <li>Continuous skills development</li> <li>Students may also be asked to complete reports and deliver orals for certain units of work</li> </ul>

Faculty	LANGUAGE
Subject name	Spanish
Subject code	SPN
Subject type	Elective Subject
Subject fee	Nil
User pays fee	Nil
Course overview	<ul> <li>Spanish is a growing language across the world with twenty-five countries that speak Spanish as an official or primary language. The reasons Spanish will be studied are many:</li> <li>The study of Spanish helps with the understanding of English grammar</li> <li>Spanish helps students extend their vocabulary</li> <li>Learning Spanish will result in an increase in student problem solving skills, memory, self-discipline and self-esteem</li> <li>Spanish is one of the official languages of the United Nations and the European Union which is important due to our accreditation and links with other international schools</li> <li>Spanish is an important trading language in the Asia-Pacific region</li> <li>Spanish is spoken by more than 350 million people across the world</li> </ul>
Course outline	This is a ONE SEMESTER course.  Students learn listening, speaking, reading and writing skills all aimed at equipping them with the ability to communicate confidently and fluently. Grammar and vocabulary are taught within the context of language learning. In Spanish, students learn both the language and culture of Spanish speaking countries. Students will also learn about the history, geography of the associated Spanish speaking countries through a variety of activities (include cooking South American food and Piñata making) and interactions with both the teacher and peers within the classroom.
Assessment	<ul> <li>Students are assessed on the four macro skills: Listening, Speaking, Reading and Writing, with equal weighting</li> <li>Generally, two of the skills are tested each term and a semester result given on the results of the combined four skills will be administered</li> <li>Cultural knowledge is either examined through assignments or as part of the Term test</li> </ul>

Subject name	Japanese
Subject code	JAP
Subject type	Elective Subject
Subject fee	Nil
User pays fee	Nil
Course overview	<ul> <li>Australia shares strong trading links with Japan</li> <li>Japanese tourists account for much of Australia's thriving tourist industry</li> <li>Australia is in close geographical proximity</li> <li>Japan has a rich cultural tradition and, although it may be described as a derivative culture borrowing from both China and the West, it is unique, because of the transformations that have been made</li> <li>There is a long history of official recognition in Australia of the importance of Japan, beginning with the establishment of the first Japanese Consulate in Townsville in 1896</li> <li>Japanese is the key language offered at the University of the Sunshine Coast</li> </ul>
Course outline	This is a ONE SEMESTER course.  Students learn listening, speaking, reading and writing skills all aimed at equipping them with the ability to communicate confidently and fluently. Grammar and vocabulary are taught within the context of language learning. In Japanese, students learn to master the three written scripts: Hiragana, Katakana, and Kanji. Students also learn about the history, geography and culture of the country, through various activities.  Students learn through practical application of the language in both formal classroom lessons and simulated situations i.e. role plays, presentations, songs, responding to taped conversations, reading magazine articles and comic strips etc. It is our intention to give our students every opportunity to extend their language study. Students in Year 10, 11 and 12, will be given the opportunity to participate in study tours to Japan.
Assessment	<ul> <li>Students are assessed on the four macro skills: Listening, Speaking, Reading and Writing, with equal weighting</li> <li>Generally, two of the skills are tested each Term and a Semester result given on the results of the combined four skills will be administered</li> <li>Cultural knowledge is either examined through assignments or as part of the Term test</li> </ul>