

Year 8 Course Selections 2020



Introduction

The curriculum at Bendigo South East College follows the Victorian Curriculum F – 10. This curriculum, developed by the Victorian Curriculum and Assessment Authority (VCAA), “is the common set of knowledge and skills required by students for life-long learning, social development and active and informed citizenship.” The Victorian Curriculum F – 10 also incorporates the Australian curriculum, whilst reflecting the key priority areas and standards for Victorian students.

Bendigo South East College also offers a small range of Victorian Certificate of Education (VCE) and Vocational Educational Training (VET) based subject offerings for Year 10 students. Teachers follow the subject specific study design published by the VCAA to construct learning centred upon the set knowledge and skills described. VET subjects knowledge and skills is derived from following the relevant industry-based training package regulated by the Australian Skills Quality Authority (ASQA).

As students move into Years 7 and 8, Bendigo South East College curriculum and subject offerings have a focus on students experiencing a broad range of subject areas and building key knowledge and skills across these offerings. Within Year 9 and 10 students are provided with increasing opportunities to exercise choice. We encourage students to consider their Year 10 program as a strong grounding for their last two years of senior secondary education.

Subject Availability

While subjects are offered within this Course Selection Guide, BSE will, once students undertake their subject selections, make decisions about running subjects based on the demand for each subject. Subjects selected by a small number of students may be withdrawn. If a subject is withdrawn, students will be notified and back-up subject choices used and/or further course counselling will be undertaken.

Learning and Student Attendance

Bendigo South East College expects students to maintain a strong attendance record. There is significant research that indicates students who miss 5 – 10% of days in any given year will have significantly lower levels of performance in Literacy and Numeracy. In future years the gaps in knowledge and skills are rarely made up. Strong attendance provides continuity in student’s learning.

Bendigo South East College will work with parents to provide support for a continuation of essential student learning if a student has some short-term absence (up to approximately 2-3 weeks) as a result of illness or injury. For absences that extend beyond this period, student needs are considered on a case-by-case basis, but parents need to be aware that the school is not equipped, nor able to support an “at-home” learning program for students for any great length of time. The school does not provide an individual learning program as part of the student’s absence due to a holiday during the term.

Subject Fees

The subjects fees shown in this booklet are indicative only and are reviewed by College Council as part of the annual ratification process. The final list of fees/charges will be included in the 2020 book lists which are distributed later in the year.

Selecting Your Year 8 Program

A Year 8 program at Bendigo South East College seeks to provide subject options that continue to build essential learning skills across a broad range of subject areas. This Course Selection Booklet provides information to assist students to make subject choices for 2020. It is a 'living document' and will very likely be updated once the outcomes of the annual 'Course Selections Strawpoll' are known.

Subject Selection

Students are expected to draw upon a variety of resources and people that can assist them to select their subjects and learning program. To fully understand the subject content and expectations, it is essential that students and parents carefully read the description of any subject in which a student has an interest. Subject descriptions start on Page 4 of this booklet. Fees indicated for subjects are indicative only. These are yet to be ratified by the BSE School Council and will be confirmed in the 2020 booklists.

Year 8 Subject Offerings Summary by Learning Area

Core Subjects		
English	Health and Physical Education	Humanities
Mathematics	Science	Strive

ELECTIVE SUBJECT CHOICES			
The Arts	Languages	Multidisciplinary Studies	Technology
Digital Art	Chinese	STEM	Automotive
Drama	German		Digital Technologies
Music	Indonesian		Food Studies
Sculpture			Materials
Visual Arts			Textiles
Visual Communication and Design			

Requirements of a Year 8 Program

In Year 8 students undertake the following program made up of compulsory (core) and elective subject options. Students must undertake two semesters of English, Mathematics, Health and PE (either core or ADP), Science, Humanities and Strive. Students then undertake four single semester electives of their choosing drawn from the Arts, Technology, Languages and Multidisciplinary learning areas, except in the following situations:

- Students studying ACA must select it in two elective 'slots' (as the subject is a full year course)
- Students studying Music must select it in two elective 'slots' (as the subject is a full year course)
- Students studying a Language must select it in two elective 'slots' (as they are full year courses)

Subject Offerings and Descriptions

The Arts Learning Area Subjects

Year 8 Academy of Creative Arts (ACA)

Subject Length: 2 semesters

Subject Fee: \$600 (to be confirmed)

If you are interested in furthering your development in the field of Dance, Drama, Visual Arts or Vocals, this subject is for you! The Academy of Creative Arts (ACA) program offers aspiring artists the opportunity to develop their own goals to work towards in their chosen field. The program also invites practising artists to run Masterclasses for students. These Masterclasses occur before and after school each week.

What is studied?

Student learning is based upon the following key knowledge and concepts:

- Mindfulness
- Collaboration
- Concepts
- Folios

What type of work is done?

Student learning is developed and assessed through:

- Theme development
- Creating works
- Presenting works
- Critiques

Additional Information

The Academy of Creative Arts is a SELECT ENTRY program. Entry into the program is undertaken through separate ACA application and audition/interview. In timetabled classes, students will be engaging in a coaching environment to work independently or in collaboration with their peers to generate and present works in their chosen field.

Year 8 Drama

Subject Length: 1 Semester

Subject Fee: No cost

If you would like to develop your self-confidence through games and performances (both scripted and self-devised), then Drama is for you! In Drama, you will have the opportunity to build your skills and knowledge about acting in the theatre by playing a range of games, learning about theatre practices and developing performances to present to your peers.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Improvisation
- Characterisation
- Naturalism/Realism
- Ensemble building

What type of work is done?

Within this subject student learning is developed and assessed through:

- Play
- Note taking
- Live Performance
- Peer reviews

Year 8 Digital Art

Subject Length: 1 Semester

Subject Fee: No cost

Digital Art is a subject that provides opportunities to explore a range of areas including photography, animation and film through the use of computers and digital applications. Students create and manipulate imagery and video through Photoshop and iMovie and various other digital programs and develop subject specific terminology to assist with annotation. Students are encouraged to creatively consider subject matter in their works as they work through final presentations.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

Photography and Photoshop

- How to creatively capture the Art Elements in photographs, using multiple viewpoints
- Develop and use appropriate terminology to annotate imagery
- Develop an understanding of basic Photoshop functions and digital manipulation of text/images
- Photographic techniques and processes
- Image analysis and reflection

Film and Animation

- Explore basic concepts and techniques of genre in film
- Use iMovie, video recording functions and editing techniques to create and edit short films
- Use basic concepts, techniques and tools to develop and create an animation
- Written analysis using relevant art terminology

What type of work is done?

Within this subject student learning is developed and assessed through:

- Workshops on style to develop skills and knowledge
- Development of a simple folio following the design process
- Extension activities to further develop individual knowledge/skills on programs/applications used
- Written and visual tasks, including an analysis and evaluation

Additional Information

- Opportunities for students to use their interests/passions to further explore applications and show individual understanding
- Variety of programs can be used including: Photoshop, iMovie, GarageBand
- Year 8 Digital Art can lead into Year 9 Multimedia and Media subjects
- Year 8 Digital Art can lead to further study (i.e. Cert III in Interactive Digital Media and VCE Media)

Year 8 Music

Subject Length: 2 semesters

Subject Fee: As outlined in the Music Program enrolment form

This subject is for students who enjoy singing or playing an instrument and want to experience working in bands and ensembles. Each class involves playing music and working towards performances. Learning music has recently been discovered to have huge benefits for brain development. It is also a brilliant way to learn more about working with other people to create something amazing!

Lessons and instrument hire are available. More information can be found here:

<https://www.bse.vic.edu.au/music-program/>

If you have questions about ability level or instruments available please talk with Mr. Briggs or Music staff.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Building awareness of music style
- Developing group performance and presentation skills
- Developing teamwork and rehearsal skills
- Building greater musical skills
- Weekly instrumental lessons
- Use of composition software
- Theory and knowledge of musical terminology
- Practical skills in sound and audio production
- Creative skills in improvising, composition and interpreting music

What type of work is done?

Within this subject student learning is developed and assessed through:

- Creative tasks and assignments.
- Performance review and reflection
- External feedback from guest artists
- Use of digital applications
- Practical instrumental and theory exam

Year 8 Sculpture

Subject Length: 1 semester

Subject Fee: \$30

Within the subject area of Sculpture, students will develop hand-building techniques by working with the medium of clay and various other sculptural materials. Mod rock, plaster, paper clay and modelling wire are just some of the materials that students will have the opportunity to experiment with. Students will create and hand sculpt unique 3-dimensional forms, implementing various mixed medium materials.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Students will develop their knowledge of clay by applying the basic techniques of pinching, coiling and wedging to the medium
- An awareness of bisque and glaze firing will be learned before firing in the kiln
- Various glazes are able to be applied to the clay for the benefit of aesthetics and functionality
- Application of the design process will apply for the development of Art language and analysis to be developed, by studying various Sculptor's artwork
- Students will develop the knowledge in displaying finished sculptures within an exhibition space

What type of work is done?

Within this subject student learning is developed and assessed through:

- A Folio of ideas and final Sculptural outcomes
- Annotation of thumbnail sketches, ideas and inspiration of other artists
- Use of mixed medium materials/glazes
- Artwork analysis
- An exam

Year 8 Visual Communication and Design

Subject Length: 1 Semester

Subject Fee: No cost

Visual Communication is for any student who likes to create designs using Photoshop and enjoys designing logos, advertisements and products. Students will learn how to use Photoshop whilst learning other drawing techniques and skills. Students investigate their ideas through using the design process to create a range of different digital and hand drawn designs and presentations.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Exploration into Communication design to create logos, advertising and product design
- Application of the design elements and principles
- Using manual and technical drawing methods (e.g. perspective drawing) to create and present designs
- How to use digital programs to create and refine design ideas and concepts

What type of work is done?

Within this subject student learning is developed and assessed through:

- Student Folio of ideas and final presentations
- Annotation of ideas and designs
- Digital Designs
- Design Analysis
- Drawings
- Exam

Year 8 Visual Arts

Subject Length: 1 Semester

Subject Fee: \$25

Year 8 Visual Art is a subject for students who are interested in expanding their skills and knowledge of the visual arts through the use of a variety of mediums and techniques including:

- Painting
- Drawing
- Collage
- Printmaking

Students are introduced to a variety of artists, both contemporary and historical, and will be provided with a range of practical workshops to expand students' individual practice. The course is structured around developing an artistic skill set and then applying this skill set to design and create a major artwork of student's choice. Students will be given opportunities to visit local galleries and will be mentored by specialist teaching staff who will assist students to meet their goals.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Students are introduced to a variety of mediums and practical techniques
- Students are introduced to a variety of artists both contemporary and historical
- Students use the design process to create a major artwork of their choice

What type of work is done?

Within this subject student learning is developed and assessed through:

- Developmental folios
- Artwork Analysis Tasks
- Major Artwork
- Exam

English Learning Area

Year 8 English

Subject Length: 2 semesters

Subject Fee: No charge

English is a compulsory subject in Year 8. Students will complete a range of reading, writing and speaking and listening activities to further their communication and literacy capabilities.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Independent Reading Program
- Novel Study
- Film Study
- The Hero's Journey
- Fake News
- Genre Writing

What type of work is done?

Within this subject student learning is developed and assessed through:

- Text response essay
- Persuasive essay
- Creative writing
- Oral presentations
- Group work

Year 8 English as an Additional Language (EAL)

Subject Length: 2 semesters

Subject Fee: No charge

English as an Additional Language (EAL) is an English subject available to students who are new English language learners. This subject is aimed at providing new English learners with the basic English and skills required to socialise in Australia. Typically, these students have not learnt English as their primary language throughout their previous schooling. For further information, contact Mr Wade McMillan, the College's EAL and Inclusion coordinator.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Vocabulary – to develop basic English and adding increasing amounts of subject specific
- Grammar functions to move from basic to more specific types
- Building use of English confidence across Reading, Writing, Speaking and Listening
- Developing subject specific language

What type of work is done?

Within this subject student learning is developed and assessed through:

- Games
- Speaking and Listening tasks
- Reading and Comprehension tasks
- Writing tasks
- Life skills as negotiated
- General knowledge – usually to support mainstream subject learning

Additional Information

Based on the learning needs of the student, work may be varied to support individual student learning. Students who qualify for English as an additional language (EAL) can study EAL for two semesters.

Health and PE Learning Area

Year 8 Physical Education

Subject Length: 2 semesters

Subject Fee: No charge

Year 8 Health and Physical Education Health is a compulsory subject for all students which involves both a practical and theoretical component. A major component of the Year 8 program is the use of Sport Education and the personal and social benefits students develop from participating in this. The health topics studied at Year 9 are Healthy Lifestyles and Building Resilience in conjunction with the Respectful Relationships curriculum.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Factors that impact upon healthy lifestyles and strategies to improve lifestyle habits
- Character strengths and strategies to build resilience
- Effective participation in Sport Education program
- Minor games – help students develop and transfer their skills into various games
- Athletics – Skill technique & development in preparation to school trials
- Major Games – AFL, Netball, Soccer, Cricket, Volleyball, Tennis, Badminton
- Cultural Games – Students will be taught a variety of Australian Indigenous games
- Fitness Testing
- Game Sense – space, time and effort

What type of work is done?

Within this subject student learning is developed and assessed through:

- Observational assessment of application within practical activities
- Sport Education delivery
- Health units are assessed through completion of workshops, collaborative activities and workbook tasks. Summative assessment task at the conclusion of health unit.

Year 8 Athlete Development Program

Subject Length: 2 semesters

Subject Fee: \$1000

ADP provides a program dedicated to improving educational and sporting outcomes for students. The program provides an opportunity for student-athletes to pursue their passion in a holistic academic and sport-based partnership. The foundations are underpinned by the individualisation and specialist nature of this program. All staff have specialised and extensive skills & experiences to facilitate this program.

At a physical level, the program aims to provide student-athletes with long-term athletic development training within a secondary college environment. To complement this physical preparation, the program provides high level technical coaching in a variety of sports.

Emphasis is placed on integrating students' passions, academic progress, behavioural expectations and effort requirements. These are the cornerstone of the ADP program.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Personalised training program
- Strength and conditioning
- Technical skills development
- Personal development
- Sports medicine support
- Victorian F – 10 Health and PE curriculum

What type of work is done?

Within this subject student learning is developed and assessed through:

- Continued Development of 'Talent', specific movement towards 'Mastery'
- Goal Setting & Individual Athlete Performance Plans
- Training Sessions specifically linked to Squad/Sport
- Individualisation of programming specific to Squad/Sport Movements (Primarily Prehabilitation)
- Consistent consultation between external coaches and ADP staff
- Continuation of Sport Performance Psychology
- Exploration of Sports Science and Training Concepts related to training and performance (Inquiry)

Additional Information

The Athlete Development Program is a SELECT ENTRY course. Entry into subject is undertaken via a separate ADP application. Contact the ADP Manager for further information. Students wishing to be part of the ADP program that are not continuing from the previous year should contact the ADP Manager to discuss potential entry into the program.

Humanities Learning Area

Year 8 Humanities

Subject Length: 2 semesters

Subject Fee: No charge

The Humanities includes four interdisciplinary strands: Civics and Citizenship, Economics and Business, Geography and History. These four strands will be covered over the two year band of Years 7 and 8. It is a compulsory subject at Year 8. Humanities provides a framework for students to examine the complex processes that have shaped the modern world and to investigate responses to different challenges including people's interconnections with the environment.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Mapping and Geographical concepts
- Geological processes
- Historical Inquiry
- Civics and parliamentary systems
- Introduction to economics, consumer and financial literacy

What type of work is done?

Within this subject student learning is developed and assessed through:

- Application Tasks
- Case study analysis
- Historical Reports
- Project Work
- Group Collaboration
- Exam and Topic Tests

Languages Learning Area Subjects

Year 8 Chinese

Subject Length: 2 semesters

Subject Fee: \$30

Chinese is a vibrant, exciting and interactive course intended to have practical value for students to listen, read, speak and write the language as it is written and spoken in China.

Exciting extension activities outside the classroom are also provided, which can enrich students' personal and social skills, making learning Chinese fun.

Participating in speech competitions, cultural immersion days, languages evening, Chinese dancing, a fashion show, festivals and celebrations, calligraphy art workshops, Chinese food tasting and authentic restaurant visits are some of the many enjoyable activities which help foster the spirit of language learning.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Using Chinese language to compare own experiences to the lives of young Chinese people
- Comparing stories and characters in both Chinese and Australian popular media and explore themes and topics that interest young people from different cultural backgrounds
- Watching interactions in Chinese between peers, families or in texts, interpreting the meaning of the dialogue as well as comparing culturally determined manners or behaviour
- Analysing the variety of verb types found in Chinese

What type of work is done?

Within this subject student learning is developed and assessed through:

- Completing the unit booklet
- Completing the unit language and cultural project
- Completing the listening, speaking, reading and writing learning assessment tasks

Year 8 German

Subject Length: 2 semesters

Subject Fee: \$30

Students have fun and are engaged in productive class learning about the German culture and language. Students gain great insight into a number of different entertaining topics ranging from German foods and animals through to aspects of daily life in Germany.

Extra-curricular events, such as trips to the Art Gallery, languages evening, German Christmas market and an exciting scavenger hunt around the school, are also part of the program.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Fluency in listening, speaking, reading and writing
- Comparing family, school, animals and seasons, food and Christmas in Australia with Germany
- Comparisons between Australian and German traditions

What type of work is done?

Within this subject student learning is developed and assessed through:

- Formative and summative vocabulary tests
- Oral presentations
- Reading and listening comprehension tasks
- Inquiry and research tasks
- Community and fundraising activities
- Regional and state-wide competitions

Year 8 Indonesian

Subject Length: 2 semesters

Subject Fee: \$30

Indonesia is Australia's closest neighbour and is the fourth most populated country in the world with over 260 million speakers of Indonesian. What better reason do you need to study Bahasa Indonesia?

Learning another language opens awareness of how other people communicate and live their daily lives. These skills are vital for communication with and acceptance towards cultures other than our own. Another language can enrich not only personal communication skills but also increase career opportunities.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Socialising with peers in Indonesian to role play dialogues
- Creating written pieces of Indonesian work for a target audience
- Translating various forms of text and creating own resource dictionary
- Reflecting on Indonesian language learning and cultural values of Indonesian life
- Building upon known grammar and vocabulary to extend understanding to new concepts
- Connecting and comparing Indonesian culture through pop culture such as music, film and slang

What type of work is done?

Within this subject student learning is developed and assessed through:

- Showcasing oral skills through presentations, role play scenarios, movie making and performances
- Completion of interactive tasks on Education Perfect and assessment aligned with these tasks
- End of semester summative assessment exams
- Creating Indonesian written pieces linking with topics
- Invitation to participate in statewide Sayembara Lisan speaking competition
- Participation in Harmony Day

Mathematics Learning Area Subjects

Year 8 Mathematics

Subject Length: 2 semesters

Subject Fee: \$76 (for online Maths resource)

Mathematics provides students with access to important mathematical ideas, knowledge and skills that they will draw on in their personal and work lives. The curriculum also provides students, as life-long learners, with the basis on which further study and research in mathematics and applications in many other fields are built.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Number & Algebra
- Measurement & Geometry
- Statistics & Probability

What type of work is done?

Within this subject student learning is developed and assessed through:

- Teacher Directed Instruction
- Differentiated Maths Workshops
- Note Taking
- Application/Rich Task Activities
- Topic Tests
- End of Semester Summative Exam

Additional Information

The BSE Maths program provides a continuum of mathematical learning and allows for the differentiation for each student.

Science Learning Area

Year 8 Science

Subject Length: 2 semesters

Subject Fee: No cost

The Year 8 Science program aims to equip students with valuable experiences to expand their knowledge of scientific theories and build on the application skills necessary to conduct interesting practical activities. Students will also work with scientific equipment, conduct research and write scientific reports.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Respiratory system
- Digestive system
- Circulatory system
- Cells
- Reflection and refraction
- Electromagnetic spectrum
- Sound waves
- Rocks and minerals
- Environmental impacts of mining
- The Scientific Method

What type of work is done?

Within this subject student learning is developed and assessed through:

- Collaborative work
- Poster work
- Discussions and oral presentations
- STILE lessons
- Research tasks
- Laboratory techniques
- Practical report
- Tests and exams

Strive

Year 8 Strive

Subject Length: 2 semesters

Subject Fee: No cost

Students will gain an understanding of Inquiry based learning for social value within the context of a self-designed topic using the Design Thinking Process. Strive also provides students with the opportunity to identify and develop their character strengths and positive mindset using resilience and gratitude based activities.

The VC F-10 Capabilities curriculum will guide workshops targeted at key skills in Critical and Creative Thinking, Collaboration and Social Awareness that are transferable for use across the BSE curriculum.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Character strengths
- Life Skills and empathy
- Inquiry learning and the Design Thinking Process
- Critical thinking and Metacognition
- Collaboration and presentation skills
- Problem solving
- Positivity, gratitude and resilience
- Questioning
- Career focused attributes and employability skills

What type of work is done?

Within this subject student learning is developed and assessed through:

- Inquiry tasks
- Collaboration tasks
- Capabilities workshops
- Goal setting

Technology Learning Area Subjects

Year 8 Automotive

Subject Length: 1 semester

Subject Fee: \$20

Students will explore the area of Automotive Technology by investigating the basic principles of mechanical systems. They will learn the basic operation of four and two stroke engines as well as other energy sources. They will explore other sub systems such as gearbox, brakes and safety systems. Students will get the opportunity to learn this through practical based work and simulated workshop practical tasks.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Different types of vehicle engines and fuels
- Vehicle subsystems
- Performance enhancements and modifications
- Vehicle safety systems and testing
- Practical learning contexts on small engines

What type of work is done?

Within this subject student learning is developed and assessed through:

- Individual and Collaborative Learning
- Theoretical and practical based approaches
- Mechanical component identification, operation and repair
- Folio compilation and submission

Year 8 Digital Technologies

Subject Length: 1 semester

Subject Fee: No fee

This subject provides the opportunity for students to develop skills in data representation and compression. Students also investigate web-site development, developing algorithms, writing programs and managing projects.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Design, create, manage and evaluate sustainable and innovative digital solutions to meet and redefine current and future needs
- Computational thinking and the key concepts of abstraction
- Systems thinking to monitor, analyse, predict and shape the interactions within and between information systems and the impact of these systems on individuals, societies, economies and environments
- Use digital systems to efficiently and effectively automate the transformation of data into information and to creatively communicate ideas in a range of settings
- Apply protocols and legal practices that support safe, ethical and respectful communication and collaboration with known and unknown audiences.

What type of work is done?

Within this subject student learning is developed and assessed through:

- Data collection
- Representation and interpretation
- Specification and algorithms
- Development to create digital solutions
- Folio compilation and submission

Year 8 Food Studies

Subject Length: 1 semester

Subject Fee: \$40

In this subject students undertake research into food sources and the properties of food. Through the use of Design Briefs, students will design and evaluate a variety of food products. Students will plan and manage individual and paired production of a number of different food items. They will make use of food models to develop their knowledge of healthy eating. Students will develop their skills of teamwork and reflection to improve their learning.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Students will learn to understand and use design briefs
- Global and consumer issues from around the world
- Food preparation skills and nutritional needs for good health in adolescence
- Designing, modifying, producing and evaluating food products

What type of work is done?

Within this subject student learning is developed and assessed through:

- Investigating, designing, producing and evaluating a variety of food products.
- Research of their own nutritional needs
- Application of knowledge to analyse personal diet using computer program tasks.
- Food preparation, consumption and evaluation
- Folio compilation and submission

Year 8 STEM

Subject Length: 1 semester

Subject Fee: \$120

Want to work with robots, virtual reality, lasers, 3D printing to design create and test solutions for our local health, agricultural, environmental systems, or even cure diseases? Then choosing STEM is your foot in the door. Studying STEM means learning about the world around you, finding innovative solutions to real-world challenges, and playing a role in some of Bendigo's major discoveries and developments.

It has been predicted that 75% of all jobs will require STEM skills over the next decade, so it is highly recommended that STEM be considered as an elective in the middle years. STEM is important for our students because future jobs will require problem solving skills, innovation and creative thinking and digital skills. STEM will allow students to further develop what is currently covered in the Strive course. Students need to learn how to think critically and flexibly in order to adapt to this rapidly changing world.

In partnership with the new, state-of-the-art Bendigo Tech School and local industries such as Thales, you'll have these opportunities and more to bring your ideas to reality in STEM. And don't forget — you'll be taught by professionals who are passionate about their fields. These include researchers, designers, engineers and seasoned industry experts who are all leaders in their fields. If you want to make a difference and use the latest and most up to date technology to immerse yourself into real world science issues, then this is the subject for you. Create your unique approach and use technology, drama, industry tours, laboratory work and field trips as all important components to add to your unique STEM journey.

What is studied?

Within this subject student learning is based upon the following key knowledge and skills:

Capabilities

- Personal and Social, Intercultural, Ethical Critical and Creative Thinking Skills
- Collaboration, Communication, Innovation, Creativity, Decision Making
- Metacognition and Deductive Reasoning
- Social Awareness & Management, Self-Awareness & Management

What type of work is done?

Within this subject student learning is developed and assessed through:

- Design Thinking
- Team Formation & Collaboration Process
- Empathy, Ideation, Planning & Research
- Prototyping & Reflective Practice
- Tech Skill Acquisition
- Human Psychology, Professional Communication

Year 8 Materials

Subject Length: 1 semester

Subject Fee: \$30

Students will develop skills in resistant and non resistant materials including woods and/or metals. Included is the safe use of equipment, solving practical problems, the development of a design folio and evaluation of the design and production process. Students are required to complete practical tasks using different materials and systems. A theory research task will be undertaken and students can design their own project which includes researching, designing, producing and evaluating.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Strategies for understanding design needs and opportunities, Visualising and generating creative and innovative ideas
- Planning, and analysing and evaluating the ideas that best meet the criteria
- Materials and their joining technologies
- Using simple materials to build working models to solve a problem

What type of work is done?

Within this subject student learning is developed and assessed through:

- Investigating, designing, producing and evaluating products
- Research of client profile and client needs
- Application of knowledge to analyse needs and problems using materials and joining technologies
- Develop skills in investigative research
- Utilise tools and equipment appropriate to a product
- Folio compilation and submission

Year 8 Textiles

Subject Length: 1 semester

Subject Fee: \$30

Textiles offers students the opportunity to understand design needs and the use of textiles as a material with a broad range of purposes. Students will investigate and generate creative ideas for solutions to problems that utilise textiles. They will explore the properties of different fibres and fabrics, increasing their knowledge and skills in the production of textile items and the sustainable and responsible use of resources.

What is studied?

Within this subject student learning is based upon the following key knowledge and concepts:

- Strategies for understanding design needs and opportunities to use textiles as a material
- Visualising and generating creative and innovative textile projects.
- Planning, and analysing and evaluating the ideas that best meet the criteria
- Different textile material and their uses
- Using textiles as a material to manufacture a product that solves a problem or need

What type of work is done?

Within this subject student learning is developed and assessed through:

- Investigating, designing, producing and evaluating products.
- Research of client profile and client needs
- Application of knowledge to analyse needs and problems using textile materials
- Develop skills in investigative research
- Utilise tools and equipment appropriate to a product