

Year 10
Subject Information

2021



Rangitoto
College

SUBJECTS

- Some subjects stop at Level 1, some at Level 2 and some lead into two or three other subjects.
- **Entry to some subjects is subject to availability.**

SUBJECTS SHOWN IN CAPITAL LETTERS & BOLDED ARE COMPULSORY AT THAT LEVEL

THE FLOW OF SUBJECTS – RANGITOTO COLLEGE 2021						
	Year 9	Year 10	NCEA LEVEL 1	NCEA LEVEL 2	NCEA LEVEL 3	
ENGLISH	ENGLISH	ENGLISH	ENGLISH	ENGLISH	English	UE
	ENGLISH for Literacy	ENGLISH for Literacy	ENGLISH for Literacy	ENGLISH for Literacy		UE
	ENGLISH Intermediate (option subject)		ENGLISH Extension	ENGLISH Extension	English Scholarship	UE
			Media Studies	Media Studies	Media Studies	UE
ENGLISH FOR SPEAKERS OF OTHER LANGUAGES	ESOL	ESOL	ESOL	UNIVERSITY ENTRANCE LITERACY ESOL	IELTS Preparation	UE
MATHEMATICS	MATHEMATICS	MATHEMATICS	MATHEMATICS Foundation	Mathematics	Mathematics	UE
				Statistics	Statistics	UE
					Scholarship Statistics	UE
			MATHEMATICS External	Calculus	Calculus	UE
			MATHEMATICS Extension	Mathematics Extension	Scholarship Calculus	UE
			MATHEMATICS for Numeracy	Applied Mathematics		
SOCIAL SCIENCE	JUNIOR SOCIAL SCIENCE	JUNIOR SOCIAL SCIENCE	Geography	Geography	Geography	UE
			Geography Extension	Geography Extension	Geography Scholarship	UE
			History	History	History	UE
			History Extension	History Extension	History Scholarship	UE
			Social Sciences Internal			
				Classical Studies	Classical Studies	UE
				History of Art	History of Art	UE
				Sociology	Sociology	UE
				Tourism	Tourism	
SCIENCE	SCIENCE	SCIENCE	Science	Biology	Biology	UE
				Chemistry	Chemistry	UE
				Physics	Physics	UE
			Science Extension	Biology Extension	Biology Scholarship	UE
				Chemistry Extension	Chemistry Scholarship	UE
				Physics Extension	Physics Scholarship	UE
			Science Internal	Science Internal	Science	UE
LANGUAGES	CHINESE	Chinese	Chinese	Chinese	Chinese	UE
					Mandarin	UE
	or JAPANESE	Japanese	Japanese	Japanese	Japanese	UE
	or SPANISH	Spanish	Spanish	Spanish	Spanish	UE
	or MAORI	Maori	Maori	Maori	Maori	UE
			French	French	French	UE

THE FLOW OF SUBJECTS – RANGITOTO COLLEGE 2021						
	Year 9	Year 10	NCEA LEVEL 1	NCEA LEVEL 2	NCEA LEVEL 3	
	Maori Performing Arts	Maori Practical Arts				
THE ARTS	Dance	Dance	Dance	Dance	Dance (& DPF)	UE
	Drama	Drama	Drama	Drama	Drama	UE
	MUSIC	Music	Music	Music	Music	UE
		Contemporary Music	Contemporary Music	Contemporary Music	Contemporary Music	UE
		Performing Arts				
	Visual Art	Visual Art	Visual Art	Painting	Painting	UE
				Print Making	Print Making	UE
			Digital Visual Art	Design	Design	UE
				Photography	Photography	UE
				Foundation PHO (FPH)	Foundation PHO (FPH)	
				Foundation Visual Art (FVA)	Foundation Visual Art (FVA)	
TECHNOLOGY	Design & Visual Communication (Technology)	Design & Visual Communication (DVC)	Design & Visual Communication (DVC)	Design & Visual Communication (DVC)	Design & Visual Communication (DVC)	UE
	Electronics (Technology)	Electronics (Technology)	Electronics (Technology)	Electronics (Technology)	Electronics (Technology)	UE
	Food (Technology)	Food (Technology)	Food (Technology)	Food (Technology)	Food (Technology)	UE
	Materials (Technology)	Materials (Technology)	Materials (Technology)	Materials (Technology)	Materials (Technology)	UE
	Textiles (Technology)	Textiles (Technology)	Textiles (Technology)	Textiles (Technology)	Textiles (Technology)	UE
			Engineering	Engineering	Engineering	
	Steam (2 semester course)			Hospitality	Combined Food & Fabric (12/13 CFF)	
				Construction (Vocational)	Timber Based Construction	
				Furniture		
COMMERCE	DIGITAL TECHNOLOGY (DGT)	Digital Technology (DGT)	Generic Computing – Applications (CPG)	Generic Computing – Applications (CPG)	Generic Computing – Applications (CPG)	
			Digital Technology (DGT)	Multimedia Technology (ICT)	Multimedia Technology (ICT)	UE
				Programming and Computer Science (PRG)	Programming and Computer Science (PRG)	UE
	Business & Economics	Business & Economics	Accounting	Accounting	Accounting	UE
			Business Studies	Business Studies	Business Studies	UE
			Economics	Economics	Economics	UE
					Economics Schol	UE
HEALTH & PE	HEALTH	HEALTH	Health	Health	Health	UE
	PHYSICAL EDUCATION	PHYSICAL EDUCATION	Physical Education	Physical Education	Physical Education	UE
				Practical Physical Education	Practical Physical Education	
			Sports Science Extension	Sports Science Extension	Sports Science Scholarship	UE
CAREERS AND LEARNING SUPPORT			KORU	KORU	KORU	
				Gateway	Pathways to Employment	

IB SUBJECTS (STUDIED IN YEAR 12 AND 13)

NCEA Level 1 Subjects	IB Subjects Offered 2021 (Y12 & 13)
English English Extension Media Studies	Language A Literature Language A Language & Literature Language B English
ESOL	Language B English
Mathematics External Mathematics Internal Mathematics Extension	Mathematics AA (Standard Level) Mathematics AI (Standard Level) Mathematics AA (Higher Level)
Geography Geography Extension	Geography
History History Extension	History
Business Studies	Business Management
Economics	Economics
<i>(No NCEA subject equivalent)</i>	Psychology
Science Science Extension	Biology Chemistry Physics
Chinese French Japanese Spanish English	<u>Beginners (Ab Initio):</u> Chinese, French, Spanish <u>Standard/Higher Level (Advanced):</u> Chinese, French, Spanish, Japanese, English <u>Other languages available via offsite tutor:</u> Currently: Spanish, Korean, and Portuguese are facilitated in this way. Other languages are available, both in Language A Literature and Language B Acquired Language.
Visual Art	Visual Art (dependent on numbers)
Music	Music (dependent on numbers)

[Pamoja education](#) (online learning) offers many IB subjects and this option can be accessed in a large number of subjects if class numbers are too small or timetable clashes arise for individual students.

GENERAL INFORMATION

Students choose **THREE** 'option' subjects in Year 10. These three subjects will be taught over the entire year along with the core subjects.

A Year 10 students' course would look as follows -

CORE SUBJECTS (all done over the entire year)	'OPTION' SUBJECTS (all done over the entire year)
English	Choice 1
Mathematics	Choice 2
Science	Choice 3
Junior Social Science	
Physical Education and Health	

It is preferable that these three 'option' subjects are chosen from the courses the student studied for a semester in Year 9. However, it is possible to pick up a new subject/s in Year 10 if this is a sensible choice for the student.

The Year 10 deans will overview the course choices made by all the year 9 students moving into year 10 in 2020 and will follow up with any who may need course counselling.

The available '**OPTION**' subject choices, to select **THREE** from, are as follows –

THE ARTS

Visual Art (ART)

Drama (DRA)

Contemporary Music (MUS)

Dance (DAN)

Music (MPF)

Performing Arts (PFA)

COMMERCE

Business and Economics (BEC)

Digital Technology (DGT)

LANGUAGES

Māori (MAO)

Japanese (JPN)

Maori Practical Arts (MPC)

Chinese (CHN)

Spanish (SPA)

TECHNOLOGY

Design and Visual Communication (DVC)

Food Technology (FOD)

Textiles Technology (TEX)

Electronics Technology (ELE)

Materials Technology (MTC)

Instructions detailing where and how to make subject choices for the following year, and the timeline will be emailed to students some time in Week 6 that starts on 24 August. **Choices** for Year 10, 2021 are **due** in PCSchool by **Monday 19 October (Week 2, Term 4)**.

The Senior Courses handbook has a great deal of information on NCEA, courses at other levels, University requirements, numeracy and literacy... It can be found on the School Website.

<https://www.rangitoto.school.nz/academic/academic-services/junior-courses>

If there are any queries or concerns then please contact the Tutor Teacher or the relevant Dean.

INTERNATIONAL BACCALAUREATE

Rangitoto College offers the International Baccalaureate Diploma Programme for **Year 12** and **Year 13 students**. Details on the International Baccalaureate are found on the Rangitoto College website address that is shown below and the subjects listed on page 3.

<http://www.rangitoto.school.nz/academic/international-baccalaureate>

Rangitoto College Timetable

Start time	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
8:40am (15)	Tutor period					
8:55am (5)	Transition time					
9:00am (60)	A	F	E	D	C	B
10:00am (5)	Transition time					
10:05am (60)	B	A	F	E	D	C
11:05am (25)	Break 1					
11:30am (80)	C	B	A	F	E	D
12:50pm (5)	Transition time					
12:55pm (40)	D	C	B	A	F	E
1:35pm-2:15pm (40)	Break 2					
2:20pm-3:20pm (60)	E	D	C	B	A	F

The schools timetable works on a 6 day rotation.

Each day has 5 periods and there is 5 minutes between each class for students to move.

SUBJECT INFORMATION

ENGLISH

ENGLISH

Year 10 English incorporates both strands of English in the New Zealand Curriculum: making meaning of the ideas and information students receive, and creating meaning for themselves and others.

English in Year 10 helps to consolidate students' knowledge of English language and literature while extending their reading and writing skills. There is a particular emphasis in the course on the knowledge and skills necessary for students to become accurate, creative and effective writers of written language.

Students study a range of text types, including a novel, a Shakespeare play, poetry, and a visual text. They produce a variety of writing including creative, comparative pieces, and writing for literary analysis. There is a range of assessment formats throughout the year: tests, written assessments, and an end of year exam.

Students work both in exercise books and with devices. Homework is set in order to help reinforce language knowledge and writing skills. Part of the course cost includes a homework grammar and language skills workbook.

We are passionate about students continuing to develop their reading habits and making progress in their personal reading for fun and challenge. We also recognise the value of students developing their vocabulary as part of becoming discerning readers, effective communicators, and critically engaged members of society.

ENGLISH FOR LITERACY

Year 10 Literacy English (10ENL) is a course offered to a small number of students who require more assistance in the subject. It is taught in a smaller class environment so that students have more teacher input.

Students who are offered a place take 10ENL alongside mainstream Year 10 English for two terms, instead of one option subject. The 10ENL course aims to develop expression and fluency with a particular emphasis on improving the fundamental skills of reading and writing.

Students cover the essential skills necessary to achieve success in English as they move through into the senior school, including studying extended and short texts, as well as an intensive focus on essential writing skills. 10ENL is assessed through coursework and block tests. In Year 11, depending on their grades, students may continue into 11ENL or may be accepted into Year 11 English.

ENGLISH INTERMEDIATE

Year 10 English Intermediate (10ENI) is offered to a select number of students who require significant assistance in the subject. It is taught in a smaller class environment so that students have more teacher input.

The course runs for the entire year and students who are offered a place take 10ENI instead of mainstream Year 10 English. The course aims to develop students' expression and fluency with a particular emphasis on improving the fundamental skills of reading and writing.

Students cover the essential skills necessary to achieve success in English as they move through into the senior school, including studying extended and short texts, film, oral presentation, vocabulary, reading comprehension, and intensive writing skills. 10ENI is assessed through coursework and block tests and an end of year exam. In Year 11, depending on their grades, students may continue into 11ENI or move into 11ENL.

E.S.O.L.

ESOL

The pre-intermediate and intermediate ESOL courses enable students whose first language is not English to become proficient users of the world's most widely spoken language. Learners are encouraged to build a foundation of vocabulary and language skills that will help them meet the demands of the subjects they study at school. A combination of teaching and learning approaches, based on the English and Learning Languages areas of the New Zealand Curriculum, is used.

Both of the courses available to year 10 students aim to provide part of the long-term pathway to literacy for university entrance. Studying English through the ESOL department includes learning about how literature communicates ideas and helps students develop an understanding of the patterns and structures used in English. Activities include a novel study, research and film study.

Courses help students to:

- learn listening, speaking, viewing, reading, and writing skills;
- use language to identify and communicate information for a range of purposes;
- develop vocabulary and explicit understanding of how grammar works and why it's important;
- acknowledge the importance of understanding relationships between culture and language;
- develop thinking skills.

Course costs: \$20

SOCIAL SCIENCES

JUNIOR SOCIAL SCIENCE

Overall Aim of Junior Social Sciences: to create a challenging and stimulating environment in which students can develop skills for understanding different concepts and engage with the world around them.

Students are required to purchase a paper exercise workbook and have a device.

Course costs are \$20 per student to cover resources supplied.

The course covers the following topics:

Cities on the Brink: Explores and evaluates how cities respond to natural and man-made disasters.

Rights and Wrongs: An investigation of human rights abuses throughout history.

Cultures Collide: Understand how the Treaty of Waitangi is responded to differently by people in different times and places.

Subject Tasters: This unit delivers a tasters of all six Senior Subjects: Geography, History, Classical Studies, Art History, Tourism and Sociology.

Year 10 Extension Junior Social Science:

This course combines the core content of the mainstream Junior Social Science course with some extension opportunities, including a more in-depth exploration of Art History, Classical Studies, History and Geography. Students will also examine and learn about key Social Science skills that will be beneficial should they choose to continue with a Social Science in Year 11.

MATHEMATICS

MATHEMATICS IS COMPULSORY FOR ALL STUDENTS UNTIL THE END OF LEVEL 1.

THIS IS TO ENSURE THE NUMERACY AND UNIVERSITY ENTRANCE REQUIREMENTS ARE SATISFIED.

MATHEMATICS

Year 10 Mathematics implements the New Zealand Curriculum document: Mathematics and Statistics. The Year 10 learning programmes cover all of the strands: Number and Algebra, Geometry and Measurement and Statistics at levels 5 and 6 of the curriculum. Students will be grouped according to their abilities and work will be adapted to best suit each individual's need within the classroom. Level 3 and 4 work will be given as appropriate for students who have gaps in their understanding. It is always important to consolidate their knowledge before moving forward.

There is an opportunity for students to be accelerated into an 11MTX class. These students will progress into an International Baccalaureate AA HL Mathematics or attending both NCEA scholarship (Calculus and Statistics) classes. Selection into this class will be by invitation. This will be decided on test results, problem solving ability, work habits and teacher recommendations.

The majority of Year 10 students study 10MAT and follow a scheme of work that covers achievement objectives relating to Level 5 of the Mathematics and Statistics curriculum. 10MAT complete 1.1 Number, a four credit Level One Achievement Standards and 1.11 Bivariate Data, a three credit Level One Achievement Standard.

Regular homework is provided to reinforce the concepts and skills covered in the learning programme. This homework involves a mixture of activities including activities on myimaths.com, google drive workbooks, work-sheets or in the commercially purchased workbook.

10MAT assessment involves common tests and one end of year, two hour examination. Tests are formative with the purpose of providing useful feedback to students about their progress. The final end of year examination will give the students practice at NCEA style assessment and help them prepare for Year 11 Mathematics. Course placement in Year 11 will be dependent on the progress each student has made in Year 10, their end of year examination grade and teacher recommendation.

Course costs are \$50. We endeavour to make our resources as accessible as possible through BYOD, however there will still be a fee to cover the workbook and resources that cannot be easily accessed electronically and therefore must be printed.

A scientific calculator is required for year 10 Mathematics. Students may want to familiarise themselves with a graphics calculator in preparation for the NCEA external examinations in Year 11. these are available at stationary stores and the Maths Resource Centre. Students are also expected to bring the appropriate equipment to class each day. Rulers, protractors and compasses are also available for sale through the Maths Resource Centre.

Mathematics is compulsory in Year 9, Year 10 and Year 11.

SCIENCE

SCIENCE

Science in Year 9 continues on into Year 10.

This interesting, highly practical course is composed of topics that cover Biology, Chemistry, Physics and Geology. The course is assessed through a combination of topic tests, two assessed practical investigations and an end of year examination.

Year 10 builds a foundation of knowledge and skills that are built upon in Year 11 Science.

Students are encouraged to continue with Science in Year 11. There are three different programmes available. Entry into the courses is based on academic progress in Year 10. Most students choose to move into year 11 General Science. Students with excellent academic progress are invited to choose Year 11 Extension Science (a double option Science program). A small number of students who benefit from a slower paced internal course are invited to select the Science Internal course.

Course costs: Resource book, Homework Book and Interactive website access \$40.00.

HEALTH & PHYSICAL EDUCATION

PHYSICAL EDUCATION

Topics covered in Physical Education fall under four strands:

- A Personal Health and Physical Development
- B Movement Concepts and Motor Skills
- C Relationships with other people
- D Healthy Communities and Environments

The overall aim is that students will develop the knowledge, skills, attitudes and motivation to make informed decisions and act in ways that contribute to their personal well-being, the well-being of other people and that of society as a whole.

There are four major themes in Physical Education, Social Responsibility, Biophysical Considerations, Project Based Learning and Sports Education. Students explore these themes using a variety of non – traditional and traditional activities.

HEALTH

Health will be taught in blocks throughout the year in Physical Education. Students will examine their own and others values and attitudes about current health issues. They will develop decision making strategies to manage risk and enhance well-being. There will be a focus on positive relationships, rights and responsibilities during the transition into adulthood.

THE ARTS

VISUAL ART

The subject constitutes a wide range of fields, including sculpture, painting, printmaking, photography, and design and strengthens problem-solving and critical-thinking skills. Students will learn to communicate ideas visually, and will be encouraged to base their work upon their own personal interests and experience.

During the semester students will experience a range of drawing, printmaking and painting skills. Students will start to learn about the various forms and processes of the Visual Arts. Through practical work and a study of artists' practice, they will learn to make images, to source and develop ideas, and to communicate and interpret meaning. Students will come to understand visual art works as social and historical texts as they investigate the contexts in which the Visual Arts are made, used, and valued.

It is important to note that the skills being taught underpin that of subsequent study, and, as a University approved course, it will allow students to prepare themselves for future creative industries pathways, including: Designer, sculptor, painter, photographer, filmmaker, printmaker, animator, illustrator, fashion designer and more. Students will learn creativity, collaboration and innovation - key skills for 21st Century careers, whichever pathway they choose to take.

The course leads on to a full year programme in future years of study.

The subject fee of approximately \$30 is payable at the beginning of this course. This covers the cost of additional materials, such as paper and paint. Students will need to purchase the Year 10 compulsory art kit, online or in store through the College's Art Stationery Supplier – Office Max. Each art kit contains the basic equipment required for the course and costs approximately \$85.

PERFORMING ARTS

DRAMA

Year 10 Drama provides an opportunity to build on previous dramatic experience or to try Drama for the first time. Students will work in a collaborative environment to explore a wide range of performance skills including improvisation, acting technique and physical theatre, within dynamic and engaging modern and historical contexts.

Students will have a variety of performance opportunities to showcase their developing skills throughout the year and these include: an improvisation unit, a scripted play, devised physical theatre and a performance related to a specific theatre form.

Throughout the year students will develop skills in self-management, relating to others, participating and contributing, as well as using key terms and vocabulary language in a variety of ways, and developing higher order thinking skills.

Students will be given a drama journal to keep and work from alongside their practical assessments. Students will maintain an organised journal of activities, readings and learning in all units of work.

There may be also be opportunities to attend performances and workshops with professional theatre companies. The course will have performance evenings throughout each term and a full play will be performed to an invited audience demonstrating skills and content learned throughout the year. Although not a prerequisite, this course is an important foundation for NCEA Level One Drama.

A materials fee of \$30 is payable at the start of the course, this covers a trip, travel costs and resources.

MUSIC

MUSIC PERFORMANCE (MPF)

This course is designed for young musicians with previous experience in the practical and theoretical aspects of music. Students will perform both in groups and as soloists. It is expected that students receive individual tuition on their chosen instrument either privately or as part of the school's itinerant music tuition system, and that they participate in one or more of the College's instrumental or vocal ensembles. All students will compose music and learn to use a variety of specialised computer music applications. Building a general musical knowledge is also essential and a range of music styles/periods will be covered throughout the year together with the development of aural and score-reading skills. This course is an important foundation for NCEA Level One Music.

CONTEMPORARY MUSIC (MUS)

An alternative course designed for young musicians with previous experience in rock/pop-based music and skills on guitar, bass, keyboard, drums and voice. Students will perform as soloists and will form bands with other students in the class. It is expected that students enrol for individual tuition on their instrument of choice, and that they participate in the co-curricular activities of the department (e.g. Rock Band, Jazz Combo, Stage Band etc). All students will compose music and learn to write songs using a variety of traditional techniques as well as modern computer based music applications. Therefore the willingness to learn how to read music and a positive attitude towards improving the reading of music and theory in general are essential. A range of music styles/periods will be covered throughout the year together with the development of aural and score reading skills. This course is an important foundation for NCEA Level One Music.

The decision of MUS or MPF will be made by the HOD Music based on student choice, discussion and consultation with the classroom music teachers.

DANCE

Year 10 Dance builds on concepts taught in Year 9, therefore it is preferred (not compulsory) that students have selected this as an option in Year 9 or have studio background training. Students engage in both practical and theoretical learning tasks. The course, which is designed to be challenging however accessible to all abilities, is for anyone who has a passion for dance and performing. The includes, but is not limited to, opportunity to choreograph in accordance with the dance elements and devices, performance opportunities through the exploration of different dance styles (e.g. jazz, contemporary, hip hop) and exploration of cultural dance. Students are expected to bring a change of clothes to enable them to move freely during class.

A materials fee of \$60 is payable at the start of the course, this covers dance performances, trips, travel costs, costumes and specialised tutors.

This course is an important foundation for NCEA Level One Dance and it is important to note that the skills being taught underpin that of subsequent study.

PERFORMING ARTS

Year 10 Performing Arts encompasses all three disciplines of Performing Arts i.e. Dance, Drama and Music. This course has been designed with a student in mind who wants to explore other disciplines and strengthen their current skills in the Performing Arts.

The course will focus on incorporating all aspects of Musical Theatre (production, performance, history, staging, technical etc.) with the goal being a Junior Musical in Term 4.

A unique aspect of the course is that it will be taught and directed by three specialist teachers in these areas who will work collaboratively to create unique and varied performance opportunities.

Students will partake in in class auditions leading into the class musical production. You will be performing in front of invited audiences throughout the year and so you have to be confident with singing, dancing and acting.

Skills in these subject areas are beneficial, however there are no prerequisites for this course. The foundations of each discipline will be covered in depth. Students enrolling in this course can also take one other course from the core Performing Arts area e.g. dance, drama or music. Content covered in core performing arts subjects will be different to that of the performing arts course.

The content covered in this course will be a foundation for Level One study in all three disciplines; Dance, Drama and Music.

A materials fee of \$60 is payable at the start of the course, this will cover a trip to watch a musical, travel costs and resources.

COMMERCE

BUSINESS AND ECONOMICS

The Year 10 Business and Economics course is divided into four parts – Economics, Accounting, Business Studies and Financial Literacy. In Economics students are introduced to the idea that for an economy to work efficiently, money has to continually change hands. Students learn about the interdependence of consumers, producers, the government and the overseas sector.

In Accounting students learn how to process accounting transactions using the accounting equation, analysis charts and general ledger. After preparing a trial balance students learn how to write up an Income Statement and Statement of Financial Position.

In Business Studies students explore the qualities of enterprising people and through a series of activities find out how enterprising they are. Many aspects of running a business are covered; including writing up a business plan and then students have a real business experience by participating in the annual market day.

In Financial Literacy students learn how to be smart with their income and spending. Topics include saving, borrowing and Kiwi Saver.

A course fee of \$18 covers workbooks.

DIGITAL TECHNOLOGY (DGT)

DIGITAL TECHNOLOGY

This course provides opportunities to explore and develop in a wide range of digital disciplines and is an excellent grounding for the Year 11 Digital Technology course. Students will develop and use skills in computing applications including 2D animation, web design, game development, desktop publishing, image creation and manipulation (bitmap and vector graphics), logic thinking and drag 'n drop programming skills as well as text based programming.

During each term students will work towards completing a project based on authentic contexts and given briefs. Students will also gain a sound understanding of accepted design practices taking into account social, ethical, and end-user considerations as they create a digital outcome for each project.

In projects like game design students will create algorithms through block and text based programming. Students will be encouraged to use logical thinking to decompose problems into step-by-step instructions to create simple and effective computer programs.

Throughout the course students will gain an understanding of ethical issues including security and privacy. They will also apply understanding operating and file management procedures using a range of storage devices while working with different software applications.

LANGUAGES

LANGUAGES

- Students can continue with one or two of the following: Māori, Japanese, Chinese, Spanish.
- Under special circumstances beginners may be accepted at Year 10 - see Miss O'Grady (Head of Languages) if you want more information.
- Students with advanced knowledge of a language may also be able to go into Year 11 – see Miss O'Grady for more information.
- Trips / exchanges are available in all subject areas. In recent years we have had school trips to France, Spain, New Caledonia, Argentina, Tahiti and Japan and we have accepted schools from these countries too. Contact Miss O'Grady if you are interested in going on exchange to the country of the language you are studying.
- All courses build on work done in Year 9, developing reading, writing, listening and speaking skills.
- Native speaker assistants in French, Spanish and sometimes Japanese are based at the College to provide extra help with oral language.
- Course costs include subscription to an online vocabulary learning website.
- **Year 10 Maori Practical Arts is a new standalone subject.** It is a hands on course that weaves together cultural knowledge through Y9 Maori Performing Arts (Kapa Haka, Waiata, Haka, Taiaha), with Technology and DVC (carving, weaving). This course will provide explicit links to kaupapa Māori through connecting to Te Ao Māori, the natural world.

LEARNING SUPPORT

Please contact Jackie Allen at the Learning Centre if you have questions about learning difficulties or special conditions support to NZQA in relation to subject choices for Year 10.

TECHNOLOGY

MATERIALS TECHNOLOGY

This course is the foundation to NCEA level one Technology. The course builds on the skills taught in Year 9MTC and consists of a series of units that continue to develop student's skills across all areas of the Technology Curriculum. This includes areas such as safe working practices, material manipulation using tools, machines and processes, product design, visual communication, CAD/CAM and product evaluation. Emphasis is placed on improving student knowledge and ability to manipulate materials and design an original/innovative product through to a prototype stage. Materials Technology leads into Yr11 Materials Technology, and many of the skills gained are transferrable into technology courses such as Textiles Technology. It can be used to gain University Entrance credits and is a launching pad to areas such as Product Design, Project Management, Industrial Design, Project Management, Furniture Design and can play a vital role in developing skills relevant to students intending to study Engineering at University.

Course Cost: Approximately \$20.00.

ELECTRONICS

This course is the foundation to the NCEA level one Electronics course. The first semester involves learning about electronic concepts, developing skills in building and testing circuits. This covers the basics of electricity through to more complex circuit systems. Design projects will be underpinned by the programming of microcontrollers to control input sensors and outputs.

Students are presented with design briefs and explore design solutions using electronics to develop concepts in authentic contexts. These will be presented through digital portfolios and follow the same technological practice that is carried out in all areas of Technology. This includes identifying a need or opportunity for a product, then researching and developing a solution through to a final product. Planning time and resources, experimenting and documenting reasoned and justified decisions as to how and why their projects should be made, are important areas of this subject.

There is a fee of \$55 that covers the cost of six take home projects.

FOOD & TEXTILES

FOOD TECHNOLOGY

Food technology in year 10 aims to extend students "creativity, knowledge and practical skills in developing food products by working through a technological process: know how, know why and know what. The know-how - practical processing skills - is only one third of the course.

Learning will be authentic: investigating real world issues, an understanding of food science and nutrition, a working knowledge of food safety and hygiene, awareness of consumer issues, sustainable practices and skills in food preparation and cooking. Students will identify needs and opportunities from a given food issue and develop their own creative food outcome. Working collaboratively, planning time and resources, experiments with ingredients, documenting evidence and creativity are all important aspects of food technology.

A course fee of \$170 is payable as a contribution to the cost of ingredients.

TEXTILES TECHNOLOGY

The year 10 programme aims to extend students 'creativity, knowledge and practical skills' in the developing textile products by working through a technological process: Know how, know why and know what.

Textiles Technology offers a hands-on environment where students are free to develop their creativity through the process of finding solutions to difficult or complex issues. Students are encouraged to expand their ideas, think outside the box, problem solve, refine and evaluate their decisions.

The academic programme is divided into 4 units of work, each exploring a different facet of 'Textiles'. The first is a 'self-discovery' journey into personal identity and the visual communication technique of decorative embellishment. Next delves into the complexities of conceptual design, from

sketch to garment. In this unit of work students are taught how 2D graphics work on a 3D garment. Students all get the opportunity to digitally design their own fabric and print at the AUT print lab. This follows a unit looking at the importance of sustainability within the textile industry and how to create sustainable design ideas. Research, critical thinking and modelling come together into exciting and innovative products. The year is finished with an E-Textiles unit, where students learn basic circuits and coding to apply to wearable technology to create their own electronic textiles product. Students are encouraged to keep a visual diary during the course. A subject fee of \$100 is payable as a contribution to the cost of materials.

DESIGN & VISUAL COMMUNICATION

Design and Visual Communication (DVC) is a design subject with a strong element of drawing. It allows students to develop skills that help them to communicate ideas in response to a design brief. It focuses on understanding and applying drawing techniques and design practice to communicate design ideas. Students will start to enhance their ability to conceptualise, develop, and communicate design ideas and potential outcomes, and their skill to interpret graphical information.

Design heritage and the evolution of design is emphasised and referenced in students' design thinking and outcomes. Students will learn the fundamental principles of aesthetics and function, and human factors, which underpin their ability to conceptualise and explore their design ideas.

Design and Visual Communication (DVC) covers two main areas of three-dimensional design:

- Spatial Design – Architecture and Environmental
- Product Design

During the year students will experience drawing, spatial design and/or product design.

This course is University approved and is a starting point for career pathways, including:

Three-dimensional design, advertising, apparel design, architecture, computer-aided design (CAD), environmental design, exhibition design, footwear design, furniture design, industrial design, interior design, landscape design, product design, game design, toy design, transportation design...

The course leads on to Level 1 NCEA DVC and then Level 2 and 3 DVC, including Scholarship, in future years of study.

The subject fee of \$30 covers the cost of DVC materials, such as paper and some equipment.

Students are expected to come to lessons equipped with basic drawing tools – pencils, ruler, 30°/60° and 45° set squares, a quality compass, eraser, quality colour pencils, an A3 carry case and an A3 clear file is also required.

Students could purchase the Year 10 DVC kit, online or in store through the College's Art Stationery Supplier – Office Max, or alternatively through another stationery provider. Each DVC kit contains the basic equipment required for the course.