



"Maa mahi,
ka ora"



Matamata
College

Matamata College Subject Choice Booklet

2021

Year 13

The curriculum offered for students at Matamata College is designed to accommodate the differing aspirations and needs of students at all levels. Students entering secondary education do so with differing backgrounds of experience and often very different levels of achievement, so it is not appropriate that they all be set the same objective.

In order to make a reasonable decision you need the right information. You should check:

- the particular qualifications required for the career(s) you have thought about.
- how these qualifications relate to school qualifications.
- the subjects that you need now for the training and education required later.
- what other institutions provide training for the career as well as the local polytechnic or university.

Remember:

- Make your own choices
- Don't allow friends to persuade you. This is about YOUR pathway.

The aim of this booklet is to provide a guide to students in planning their pathways towards further education, training and employment. It contains a detailed listing of courses to be offered at Matamata College in 2021, along with a listing of teachers/personnel who can give you guidance with your course selections.

Also included is a career choice guide, some important information about university entrance requirements and approved subjects, rank scores, and some general information about NCEA.

Before you make your decision on the subjects that you would like to study in 2021, find out as much information as you can about NCEA courses, the requirements for NCEA at each level, University Entrance requirements, approved subjects, careers, etc. by:

- Reading these pages, and asking teachers, the Careers Department and parents
- Logging onto Career Central
- Referring to the NCEA website www.ncea.govt.nz
- Referring to university or other tertiary websites
- Visiting subject teachers and HOL
- Finding out what subjects you will need now for the future training and education required for the careers you have thought about.

The National Certificate of Educational Achievement (NCEA) is New Zealand's national school qualification. It is a qualification on New Zealand's National Qualifications Framework (NQF) that sits alongside more than 900 other national qualifications used throughout tertiary education and industry training. Students at school are also able to attain many of these other specialist qualifications as they complete NCEA.

A selection of achievement and/or unit standards is studied in each subject, with each standard being worth a set number of "credits". The standards offered in each subject are listed in this booklet.

Under NCEA, students can be assessed through both external examinations and internal assessment. Some courses have no external examinations, and some have up to 3 achievement standards assessed in external examinations.

Both internal assessment results as well as external examination results contribute credits towards NCEA and other qualifications on the NQF. There are rigorous external moderation checks to ensure that internal assessments are done fairly and consistently across New Zealand schools.

Achievement Standards

For every achievement standard, the student result will be Achieved, Merit, Excellence or Not Achieved. A student who receives Achieved, Merit or Excellence will gain the credits for that achievement standard. The number of credits for each standard does not increase if a student achieves Merit or Excellence, but Merit and Excellence results, especially at Level 3, are likely to have a significant effect on whether or not a student is eligible to enter certain university courses.

Unit Standards

For every unit standard, students will receive either Achieved or Not Achieved.

The credits for unit standards count toward NCEA in the same way that credits for achievement standards do.

Whatever the course selection, there is a clear expectation that students will commit themselves to serious, sustained effort.

All Students at Years13 are required to take **FIVE** Subjects. There are **NO** compulsory subjects.

Important Notes

1.You cannot study 2 subjects which have more than one achievement standard that is the same in each course. This applies to subjects such as Technology and Graphical Design subjects. Make sure that you look carefully at the listing of achievement standards to be offered in each subject.

2.We will do our best to provide you with your subject selections, but sometimes this is not possible because of timetabling or staffing. In that case your alternative subject/s may need to be used.

3.Your subject selections will be checked by your Dean to ensure that you have made appropriate choices and that there is a good level of pathway coherency in your overall course selection.

ACCOUNTING (ACC300)		COMMERCE
Description This is a one-year course designed to enable students to develop the skills and knowledge required to continue to study Accounting at a tertiary level. This course also prepares students for the use of accounting practices in the modern world, which is not only limited to recording financial transactions but also provides a basic framework for decision making, providing relevant information to various users and assists in both short run and long run planning.		Qualification <ul style="list-style-type: none"> NCEA Level 3 UE approved subject Course endorsements to Excellence
Course Content During the course students will: <ul style="list-style-type: none"> Process financial information and prepare financial statements for partnerships and companies Explore manufacturing job cost sub-systems Prepare information for management decision making Prepare a report for an external user that interprets the annual report of a NZ reporting entity 		Assessment Types <ul style="list-style-type: none"> Internal NZQA standards External NZQA standards Literacy and numeracy credits
Prerequisites ACC100 is recommended.	Costs None	Literacy Level Students will need good literacy skills
Internals A.S 91405 Demonstrate understanding of accounting for partnerships (4 credits) NUM A.S 91407 Prepare a report for an external user that interprets the annual report of a New Zealand reporting entity (5 credits) LIT / NUM A.S 91409 Demonstrate understanding of a job cost subsystem for an entity (4 credits) LIT / NUM		Externals A.S 91406 Demonstrate understanding of a company financial statement preparation (5 credits) NUM A.S 91408 Demonstrate understanding of management accounting to inform decision-making (4 credits) LIT / NUM
Additional Notes Accounting complements a variety of subjects such as ECO300		

AGRICULTURE / HORTICULTURE (AGR300)		SCIENCE
Description A continuation of the Agriculture / Horticulture course started at Year 11 & 12 which is assessed under the Primary Industry Training Organisation. The emphasis is on more advanced practical skills and Agriculture / Horticulture theory. (These credits are transferable to the NCEA Level 3 qualification) This course prepares students for: higher level study, life skills, direct links to the Polytechnics, on-job training and links with training providers		Qualification <ul style="list-style-type: none"> NCEA Level 3 National Certificate in Agriculture (Level 3)
Course Content <ul style="list-style-type: none"> Nursery Production Animal Anatomy & Physiology Fencing Rural Workplace Injuries 		Assessment Types <ul style="list-style-type: none"> Internal NZQA standards ITO standards
Prerequisites None. This course is an applied Science subject. Students must be willing to get their hands dirty.	Costs A fee may be charged for any optional component, trip etc. related to this course. Parental/guardianship permission would be sought prior to the fee being charged.	Literacy Level Suits students at all literacy levels
Internals U.S 18 Demonstrate knowledge of animal anatomy and		Externals A.S 90928 Demonstrate understanding of biological

physiology (4 credits) U.S 37 Install wire fencing (6 credits) U.S 24563 Operate a quad bike with mounted equipment or load under limited supervision (3 credits) U.S 20560 Grow nursery crops in containers (10 credits)	ideas relating to the life cycle of flowering plants (4 credits) LIT A.S 90929 Demonstrate understanding of biological ideas relating to a mammal(s) as a consumer(s) (3 credits) LIT A.S 90948 Demonstrate understanding of biological ideas relating to genetic variation (4 credits) LIT
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ART PAINTING (ART300)		ART
Description Painting at Level 3 prepares students for entrance to university and independent study. It is a highly personalised journey and students must be extremely motivated to succeed. They will build on skills and techniques acquired at Level 2 and develop their means of self-expression.		Qualification <ul style="list-style-type: none"> NCEA Level 3 UE approved subject Course endorsements to Excellence
Course Content This course is highly practical with some research and a great deal of practical application of ideas and techniques. The disciplines of drawing, printmaking and painting are covered in depth. This course assumes a high degree of personal interest and commitment, plus a developed ability to think creatively and originally.		Assessment Types <ul style="list-style-type: none"> Internal NZQA standards External NZQA standards
Prerequisites Level 2 paint/photography & by arrangement	Costs \$55 Optional Stationery Art Pack	Literacy Level Students will need good literacy skills
Internals A.S 91446 Use drawing to demonstrate understanding of conventions appropriate to design /painting /photography /printmaking /sculpture (4 credits) A.S 91451 Systematically clarify ideas using drawing informed by established design/painting/photography/printmaking/sculpture practice (4 credits) A.S 91460 Produce a resolved work that demonstrates purposeful control of skills appropriate to a visual arts cultural context (4 credits) <i>optional</i>		Externals A.S 91456 Produce a systematic body of work that integrates conventions and regenerates ideas within design/painting/photography/printmaking/ sculpture practice (14 credits)

ART PHOTOGRAPHY (ARP300)		ART
Description Photography at Level 3 prepares students for entrance to university and independent study. It is a highly personalised journey and students must be extremely motivated to succeed. They will build on skills and techniques acquired at Level 2 and develop their means of self-expression.		Qualification <ul style="list-style-type: none"> NCEA Level 3 UE approved subject Course endorsements to Excellence
Course Content This course is highly practical with some research and a great deal of practical application of ideas and techniques. The discipline of photography and computer manipulation are covered in depth. This course assumes a high degree of personal interest and commitment, plus a developed ability to think creatively and originally.		Assessment Types <ul style="list-style-type: none"> Internal NZQA standards External NZQA standards
Prerequisites Level 2 paint/photography & by arrangement	Costs \$25 Optional Stationery Art Pack SD Card	Literacy Level Suits students at all literacy levels
Internals A.S 91442 Analyse methods and ideas from established		Externals A.S 91457 Produce a systematic body of work

<p>design/painting/photography/printmaking/sculpture practice (4 credits) LIT <i>optional</i></p> <p>A.S 91447 Use drawing to demonstrate understanding of conventions appropriate to design /painting /photography /printmaking /sculpture (4 credits)</p> <p>A.S 91452 Systematically clarify ideas using drawing informed by established design /painting /photography / printmaking /sculpture practice (4 credits)</p>	<p>that integrates conventions and regenerates ideas within design /painting /photography /printmaking / sculpture practice (14 credits)</p>
<p>Additional Notes</p> <p>A digital SLR camera is helpful but not compulsory as there are some available for student use through a booking system</p>	

BIOLOGY (BIO300)		SCIENCE
<p>Description</p> <p>The course further develops the Biological concepts covered at Level 2, including the structure and function of organisms from the molecular to the organ system level. Students will develop their understanding of how organisms adapt and respond to their environment and learn about human evolution. They will also carry out a thorough practical investigation and produce an evidence-based personal opinion on a controversial topic.</p> <p>Students will find this course useful if they are planning to have any career in Scientific Research, Medicine & Health, Environmental Studies, Horticulture or Agriculture.</p>		<p>Qualification</p> <ul style="list-style-type: none"> • NCEA Level 3 • UE approved subject • Course endorsements to Excellence
<p>Course Content</p> <p>The areas of study are:</p> <ul style="list-style-type: none"> • How organisms respond to their environment • Detailed biological investigation • Human biological and cultural evolution • Homeostasis (how animals maintain a stable internal environment) • Biotechnological advances in gene transfer • Investigation of a socio-scientific issue 		<p>Assessment Types</p> <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards
<p>Prerequisites</p> <p>Students must have satisfactorily completed the Year 12 Biology course.</p>	<p>Costs</p> <p>None</p>	<p>Literacy Level</p> <p>Students will need good literacy skills</p>
<p>Internals</p> <p>A.S 91601 Carry out a practical investigation in a biology context, with guidance (4 credits) LIT / NUM</p> <p>A.S 91602 Integrate biological knowledge to develop an informed response to a socio-scientific issue (3 credits) LIT</p> <p>A.S 91604 Demonstrate understanding of how an animal maintains a stable internal environment (3 credits) LIT</p>		<p>Externals</p> <p>A.S 91603 Demonstrate understanding of the responses of plants and animals too their external environment (5 credits) LIT</p> <p>A.S 91606 Demonstrate understanding of trends in human evolution (4 credits) LIT</p>

CALCULUS (MAC300)		MATHEMATICS
<p>Description</p> <p>This course encourages the development of mathematical skills. It is designed for students who may take up tertiary study in Mathematics, Sciences, Medicine, Engineering and related fields.</p>		<p>Qualification</p> <ul style="list-style-type: none"> • NCEA Level 3 • UE approved subject • Course endorsements to Excellence
<p>Course Content</p>		<p>Assessment Types</p>

The areas of study are: <ul style="list-style-type: none"> • How organisms respond to their environment • Detailed biological investigation • Human biological and cultural evolution • Homeostasis (how animals maintain a stable internal environment) • Biotechnological advances in gene transfer • Investigation of a socio-scientific issue 		<ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards
Prerequisites 14+ Level 2 Mathematics Achievement Standards including Algebra, Calculus and Graphs	Costs None	Literacy Level Students will need good literacy and numeracy skills
Internals A.S 91575 Apply trigonometric methods in solving problems (4 credits) NUM	Externals A.S 91577 Apply the algebra of complex numbers in solving problems (5 credits) NUM A.S 91578 Apply differentiation methods in solving problems (6 credits) NUM A.S 91579 Apply integration methods in solving problems (6 credits) NUM	
Additional Notes Suitability for the course may be decided by consultation with the Learning Area Leader of Mathematics and the Year 13 Dean. A Graphics calculator is essential.		

CHEMISTRY (CHE300)		SCIENCE
Description This course develops the ideas introduced from Year 12 Chemistry. It consists of 5 units of work developing research, practical skills and theoretical knowledge. Students will find this course useful if they are planning to pursue a career in the Science, Technology or Medical Sciences fields.	Qualification <ul style="list-style-type: none"> • NCEA Level 3 • UE approved subject • Course endorsements to Excellence 	
Course Content The areas of study are: <ul style="list-style-type: none"> • Inorganic structure and bonding • Reduction and oxidation reactions • Aqueous solutions • Organic chemistry • Spectroscopy 	Assessment Types <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards • Scholarship 	
Prerequisites CHE200	Costs None	Literacy Level Suits students at all literacy levels
Internals A.S 91388 Demonstrate understanding of spectroscopic data in chemistry (3 credits) A. S 91393 Demonstrate understanding of oxidation-reduction processes (3 credits) LIT	Externals A.S 91390 Demonstrate understanding of thermochemical principles and the properties of particles and substances (5 credits) LITA.S 91391 Demonstrate understanding of the properties of organic compounds (5 credits) LITA.S 91392 Demonstrate understanding of equilibrium principles in aqueous systems (5 credits) LIT / NUM	
Additional Notes Exceptional students with PSC100 and MAT101 can apply to be considered for the course.		

CONSTRUCTION & ALLIED TRADES (TRA300)		HARD TECHNOLOGY
Description This course is a Building and Construction course designed for those students wishing to pursue a career in this industry. Due to the nature of the practical work we build, a limit of 15 students max has been placed on this class.	Qualification <ul style="list-style-type: none"> • NCEA level 2 & 3 	
Course Content	Assessment Types	

The course participants will work together to use advanced skills and techniques to build a large-scale construction project. Previous examples of projects include building a sleepout and a cruiser wooden boat.		<ul style="list-style-type: none"> Internal NZQA standards
Prerequisites Students have experience of CAT at Level 1 or 2.	Costs None	Literacy Level Suits students with a fair/good literacy level
Internals US29682 Select, use, and maintain tools, equipment and machinery for a Stage 3 BCATS project 4 credits US29684 Undertake a stage 3 BCATS project 12 credits US29678 Demonstrate knowledge of, select, and use materials for s Stage 3 BCATS project 4 credits US012 BCATS Student Work Diary 3 credits		Externals This is an internally assessed course

DESIGN AND VISUAL COMMUNICATION (DVC300)		TECHNOLOGY
Description In Year 13 Design and Visual Communication you work on one project that covers either product or spatial design. You are advised to engage a professional advisor as stakeholder feedback for your design ideas. You can choose to complete these projects using your strengths in sketching, computer aided drawing and model making.		Qualification <ul style="list-style-type: none"> NCEA Level 3 UE approved subject Course endorsements to Excellence
Course Content What students are going to gain from the course <ul style="list-style-type: none"> Project management skills CAD skills (Archicad, Fusion 360, Blender, Sketch up) CAM skills (Laser cutter) Virtual Reality Exhibition Design and Implementation Graphic design skills (Photoshop, Illustrator) Specialist product design knowledge Specialist spatial design knowledge Specialist graphic design knowledge Specialist construction design knowledge 		Assessment Types <ul style="list-style-type: none"> Internal NZQA standards External NZQA standards Scholarship
Prerequisites Students are required to have satisfactory completion of DVC at Year 12	Costs An A3 Visual Diary is required for this course. It can be purchased from school for \$7(optional). A fee may be charged for any optional component, trip etc related to this course. Parental/guardianship permission would be sought prior to this fee being charged.	Literacy Level Students will need good literacy skills
Internals A.S 91629 Resolve a spatial design through graphics practice (6 credits) Or A.S 91630 Resolve a product design through graphics practice (6 credits) And A.S 91628 Develop a visual presentation that exhibits a design outcome to an audience (6 credits) A.S 91608 Undertake brief development to address an issue with a determined context (4 credits) LIT		Externals A.S91627 Initiate design ideas through exploration (4 credits)

DIGITAL DESIGN & OFFICE (DDO300)		DIGITAL TECHNOLOGIES
Description This subject gives students the ability to produce work for advanced digital design. Using the Adobe suite and / or Microsoft applications, students will design and create a functioning website for a client.		Qualification <ul style="list-style-type: none"> NCEA Level 3 UE approved subject Course endorsements to Excellence

Course Content Depending on the student, units might include:		Assessment Types
<ul style="list-style-type: none"> • General Computer Literacy • Advanced Word Processing • Advanced Spreadsheet/Database • Advanced Presentation • Advanced Desktop Publishing • Advanced Websites 		<ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standard
Prerequisites Ideal if student has done Level 1 or Level 2 DDO or DSH but not essential.	Costs None	Literacy Level Suits students at all literacy levels
Internals AS91903 Use complex techniques to develop a digital media outcome AS91907 Use complex processes to develop a digital technologies outcome AS91902 Use complex techniques to develop a database or AS91900 Conduct a critical inquiry to propose a digital technologies outcome		Externals AS91909 Present a reflective analysis of developing a digital outcome

DIGITAL SCIENCE & HARDWARE (DSH300)		DIGITAL TECHNOLOGIES
Description The aim of this course is to give students advanced computing skills needed for future employment. Students will learn how to use a range of computer hardware and software to solve problems to a high standard. Students will further develop skills in computer programming.		Qualification <ul style="list-style-type: none"> • NCEA Level 3 • UE approved subject • Course endorsements to Excellence
Course Content <ul style="list-style-type: none"> • Programming • Configuring a network • Computer Science 		Assessment Types <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards
Prerequisites Successful completion of DSH200 (or) Merit or above average in DDO200 (or) Consultation with TIC Digital Technologies	Costs None	Literacy Level Students will need good literacy skills
Internals 3.1 – 91900 Conduct a critical enquiry to propose a digital technologies outcome 6 credits 3.6 – 91905 Use complex techniques to develop a network 4 credits 3.7 – 91906 Use complex programming techniques to develop a computer program 6 credits		Externals 3.9 – 91908 Analyse an area of computer science 3 credits
Additional Notes UE in DSH300 is gained in the Technology domain.		

DRAMA (DRA300)		DRAMA
Description This subject builds upon the fundamental skills taught in DRA100. It focuses on developing students' performance abilities even further through exploration of various theatre styles and forms. Students will find this course useful if they are considering a career in a performance-based industry. It will help them develop confidence in addressing both small and large groups of people and teaches them the importance of being able to work collaboratively with their peers.		Qualification <ul style="list-style-type: none"> • NCEA Level 2 • Course endorsements to Excellence
Course Content <ul style="list-style-type: none"> • Working with script 		Assessment Types <ul style="list-style-type: none"> • Internal NZQA standard

<ul style="list-style-type: none"> • Application of Drama techniques • Exploring Elizabethan Theatre through live performance • Performing for a live public audience • Analysis of Drama processes and professional performance 		<ul style="list-style-type: none"> • External NZQA standards
Prerequisites DRA100, or with prior permission from the Learning Area Leader of Drama.	Costs None	Literacy Level Suits students at all literacy levels
Internals A.S 91213 Apply drama techniques in a scripted context (4 credits) LIT A.S 91214 Devise and perform a drama to realise an intention (5 credits) LIT A.S 91218 Perform a substantial acting role in a scripted production (5 credits) LIT		Externals A.S 91219 Discuss drama elements, techniques, conventions and technologies within live performance (4 credits) LIT

ECONOMICS (ECO300)		SOCIAL SCIENCE
Description Economics is the study of the most efficient use of scarce resources and the choices that are made in the market. The Laws of Demand and Supply, marginal utility, allocative efficiency and equilibrium are modelled and analysed to gain an understanding of the impact of intervention in the market and such effects on pricing given the efficiency of different market structures.		Qualification <ul style="list-style-type: none"> • NCEA Level 3 • UE approved subject • Course endorsements to excellence
Course Content The course is a one-year stand-alone course where prior knowledge of economics is useful but not essential. The course covers three main areas of Economics: <ul style="list-style-type: none"> • Resource Allocation via the Private Sector • Resource Allocation via the Public Sector • The impact of market changes on buyers, sellers and the Government 		Assessment Types <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards
Prerequisites None	Costs None	Literacy Level Students will need good literacy skills
Internals A.S 91401 Demonstrate understanding of micro-economic concepts (5 credits) LIT A.S 91402 Demonstrate understanding of government interventions to correct market failures (5 credits) LIT		Externals A.S 91399 Demonstrate understanding of the efficiency of market equilibrium (4 credits) LIT A.S 91400 Demonstrate understanding of the efficiency of different market structures using marginal analysis (4 credits) LIT

ENGINEERING (EER300)		HARD TECHNOLOGY
Description Students develop specific skills in the Engineering workshop, study theoretical knowledge and complete appropriate practical projects.		Qualification <ul style="list-style-type: none"> • NCEA Level 3 • UE approved subject • Course endorsements to excellence
Course Content The areas of study are: <ul style="list-style-type: none"> • Engineering materials • Engineering processes • Safety • Welding 		Assessment Types <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards

<ul style="list-style-type: none"> Power Tools Machining Fusion 360 CAD programme 		
Prerequisites The satisfactory completion of EER200	Costs There is a cost to the Engineering department for materials to deliver this course. Any items the student makes and wants to take home incur a cost, depending on the amount of extra materials used. Parental / guardianship permission would be sought prior to a fee being charged. This must be paid in full before the product can be taken home.	Literacy Level Suits students at all literacy levels.
Internals US 2436 Create three-dimensional engineering models using CAD software under supervision US 4797 Demonstrate knowledge of the composition of common engineering metals US 20799 Demonstrate knowledge of common engineering metals US 20802 Produce detailed two-dimensional engineering drawings using CAD software under supervision US 21910 Interpret mechanical engineering drawings		Externals This is an internally assessed course.

English (ENG301-303)		English			
Description Level 3 English is a dynamic course that encourages a high level of critical thinking, text analysis, lateral thinking and discussion-based learning. The course is designed to prepare students to successfully engage at a first-year university level. Level 3 English involves teaching, learning and assessment in the two areas of: <ul style="list-style-type: none"> Creating Meaning – Listening, Reading and Viewing Making Meaning – Speaking, Writing and Presenting 	Qualification <ul style="list-style-type: none"> NCEA Level 3 UE Approved Subject Course endorsements to Excellence 	Assessment Types <ul style="list-style-type: none"> Internal NZQA standards External NZQA standard 			
	Prerequisites Level 2 English – 14 Credits		Costs None		
	Course Content The activities included in this course will involve: <ul style="list-style-type: none"> Various writing tasks Responding to various works of literature. e.g. short stories, poetry, novels and films In addition, the course will emphasise speaking to an audience and constructing visual texts. The course will build on skills established in Year 12. 		Literacy Level <ul style="list-style-type: none"> Students will need good literacy skills 		
	Additional Notes Suitability for the course will be decided by consultation with the Learning Area Leader of English and Year 13 Dean.				
Assessments – students will complete a range of the assessments from below depending on what class they are in. On occasion students may also complete standards from the core generics. Students will complete up to a maximum of 18 credits.					
Domain	Assessment #	Title	Credits	Internal/External	Literacy
English	91472	Respond critically to specified aspect(s) of studied written text(s), supported by evidence	4	External	L1 Literacy Reading and Writing UE Lit
English	91473	Respond critically to specified aspect(s) of studied visual or oral text(s), supported by evidence	4	External	L1 Literacy Writing UE Lit
English	91474	Respond critically to significant aspects of unfamiliar written	4	External	L1 Literacy

		texts through close reading, supported by evidence			Reading and Writing UE Lit
English	91475	Produce a selection of fluent and coherent writing which develops, sustains and structures ideas	6	Internal	L1 Literacy Writing UE Lit
English	91476	Create and deliver a fluent and coherent oral text which develops, sustains and structures ideas	3	Internal	L1 Literacy
English	91477	Create a fluent and coherent visual text which develops, sustains and structures ideas using verbal and visual language	3	Internal	L1 Literacy
English	91478	Respond critically to significant connections across texts, supported by evidence	4	Internal	L1 Literacy
English	91479	Develop an informed understanding of literature and/or language using critical texts	4	Internal	L1 Literacy Reading UE Lit
English	91480	Respond critically to significant aspect(s) of visual and/or oral text(s) through close reading, supported by evidence	3	Internal	L1 Literacy

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ELL300)		LANGUAGES
Description This course has been developed to assist learners whose first language is not English, to achieve English language skills across all levels and gain NCEA credits.		Qualification <ul style="list-style-type: none"> NCEA Level 3
Course Content <ul style="list-style-type: none"> Demonstrate understanding of detailed spoken instructions Participate in spoken transactions Participate in a formal interview Write a response for a specific purpose Read and understand texts on familiar topics Write texts on familiar topics 		Assessment Types <ul style="list-style-type: none"> Internal NZQA standards Unit Standards Formative and Summative
Prerequisites English is not your first language	Costs IELTS if entered	Literacy Level Suits students with English literacy needs

FASHION & DESIGN (FDT300)		SOFT MATERIALS TECHNOLOGY
Description This subject gives students the opportunity to work with a client to develop fashion to meet their needs. Practical and theory assignments will help students understand business practice in textile trades and industries. Students will find this course useful if they want to work in the fashion, interior design or textile industries or if they want to learn more advanced sewing skills.		Qualification <ul style="list-style-type: none"> NCEA Level 3 UE approved subject
Course Content <ul style="list-style-type: none"> Developing designs for a client or yourself Sewing garments or articles for a client or yourself Drafting and making patterns 		Assessment Types <ul style="list-style-type: none"> Internal NZQA standards
Prerequisites Year 11 or 12 Fashion and Design	Costs There is a cost associated to this course for a student to construct a garment. Students will calculate the cost of their garment. Parental/guardianship permission would be	Literacy Level Students will need good literacy skills

	sought prior to this cost/fee being charged. This must be paid in full before the garment can be taken home. Suitable fabrics for garments are available at school but students may wish to choose and purchase their own fabric.	
Internals A.S 91610 Develop a conceptual design considering fitness for purpose in the broadest sense (6 credits) LIT A.S 91611 Develop a prototype considering fitness for purpose in the broadest sense (6 credits). LIT A.S 91621 Implement complex procedures using textile materials to make a specified product (6 credits)		Externals This is an internally assessed course.
Additional Notes Advanced lined garments of the student's choice are the expected standard.		

FOOD TECHNOLOGY (FTE300)		HARD TECHNOLOGY
Description A challenging and creative academic course using Food Technology and Home Economics papers. Students focus on complex food processing, skillful brief development, dietary and well-being issues in New Zealand. Assessments require equal amounts of practical and written tasks. Tasks require students to be experienced with food and cooking, and to be self-directed and confident. Students also need good researching and writing skills to complete essays and/or reports.		Qualification <ul style="list-style-type: none"> NCEA Level 3 UE approved subject Subject endorsement available
Course Content <ul style="list-style-type: none"> Implement advanced procedures to process a specified product Demonstrate understanding of advanced concepts used in processing Demonstrate understanding of advanced concepts used in preservation & packaging for product storage External: AS91359 Demonstrate understanding of the role of material evaluation in product development 		Assessment Types <ul style="list-style-type: none"> Internal NZQA Standards External NZQA Standards
Prerequisites 14+ credits in Y12 Food Technology essential to be able to manage the demands of FTE300	Costs A donation/contribution can be paid on your student's account. A fee may be charged for any optional component, trip etc. related to this course. Parental/guardianship permission would be sought prior to this fee being charged.	Literacy Level Students will need good literacy skills
Internals A.S 91608 Undertake brief development to address an issue within a determined context (4 credits) A.S 91643 Implement complex procedures to process a specified product (4 credits) A.S 91466 Investigate. Nutritional issue affecting the well-being of New Zealand society (5 credits) LIT		Externals A.S 91613 Demonstrate understanding of material development (4 credits)
Additional Notes Students are expected to wear an apron and to tie long hair back for practical lessons. Wearing closed toe shoes is strongly recommended for practical lessons.		

FRENCH (FRE300)		LANGUAGES
Description Students studying Year 13 French will develop their language skills to an extent where they will be able to present arguments, discuss problems and express themselves imaginatively in French		Qualification <ul style="list-style-type: none"> NCEA Level 3 UE approved subject Course endorsements to Excellence
Course Content		Assessment Types

<ul style="list-style-type: none"> • French literature • Society issues e.g. immigration • Film study 		<ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards
Prerequisites NCEA Level 2 French (minimum 12 credits)	Costs None	Literacy Level Students will need good literacy skills
Internals A.S 91544 Give a clear spoken presentation in French that communicates a critical response to stimulus material (3 credits) 91547 Write a variety of text types in clear French to explore and justify varied ideas and perspectives (5 credits)		Externals A.S 91543 Demonstrate understanding of a variety of extended spoken French texts (5 credits) A.S 91546 Demonstrate understanding of a variety of extended written and/or visual French texts (5 credits)

GATEWAY (GWY300)		CAREERS
Description Open for all Year 13 students. Gateway involves completion of work placements in industries of your choice combined with tertiary and trade theory papers to gain credits toward NCEA Level 3 and support future career choices. Suitable for those intending on gaining full-time or part-time employment, tertiary study at university or polytechnic and those seeking apprenticeships.		Qualification <ul style="list-style-type: none"> • Towards NCEA Level 3
Course Content <ul style="list-style-type: none"> • Industry placements vary between one day per week, half days, weekend and holiday, dependent upon student and employer schedule. • Health & Safety and First Aid Certificates • Industry based Level 3 credits or tertiary institute papers from your field of choice and suited to individual student requirements • Attendance at various short courses, tertiary visits and one day taster events • Career-based events and training • Creation of individual vocational plan and CV • Linked with local employers, job and training opportunities 		Assessment Types <ul style="list-style-type: none"> • ITO standards • Unit standards
Prerequisites Students selected after an interview process and must be prepared to commit to completing unit standard and short courses	Costs None	Literacy Level Suits students at all literacy levels
Additional Notes Gateway is open to all Year 13 students and is chosen over and above your 5 Year 13 subjects. Students are expected to use study periods and own time to complete industry related tertiary papers		

GEOGRAPHY (GEO300)		SOCIAL SCIENCES
Description Geography is the study of the environment as the home of people. It explores the relationships and connections between people and both natural and cultural environments. Students will learn to think spatially, use maps, visual images and new technologies to obtain, present and analyse information. Geography encourages students to think critically. Geography equips students with the knowledge and skills to interpret the world in which they live.		Qualification <ul style="list-style-type: none"> • NCEA Level 3 • UE approved subject • Course endorsement to Excellence
Course Content		Assessment Types <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards

<p>The course can be co - constructed with the students in the class depending on their interests and career pathways. Geographic skills will be developed, and Geographic concepts explored through a range of contexts including:</p> <ul style="list-style-type: none"> • The Natural Environment • Tourism Development • Event Management • Local contemporary issues • Global topics • Geographic Research 		
<p>Prerequisites Level 2 Geography or AT LEAST ONE reading or writing Level 2 English standard is required, and new geographers are at the discretion of the HOL.</p>	<p>Costs TBC. Possibility of an optional overnight fieldtrip of around \$300. Parental/guardianship permission would be sought prior to this fee being charged.</p>	<p>Literacy Level Students will need good literacy skills</p>
<p>Internals A.S 91428 Analyse a significant contemporary event from a geographic perspective (3 credits) LIT A.S 91430 Conduct geographic research with consultation (5 credits) LIT / NUM A.S 91431 Analyse aspects of a contemporary New Zealand geographic issue (3 credits) LIT A.S 91246 Explain aspects of a contemporary geographic issue (3 credits) LIT A.S 91432 Analyse aspects of a geographic topic at a global scale (3 credits) LIT</p>		<p>Externals A.S 91427 Demonstrate understanding of how a cultural process shapes geographic environment(s) (4 credits) LIT A.S 91429 Demonstrate understanding of a given environment(s) through selection and application of geographic concepts and skills (4 credits) LIT / NUM A.S 91243 Apply geographic concepts and skills to demonstrate understanding of a given environment (4 credits) LIT</p>

HISTORY (HIS300)		SOCIAL SCIENCES
<p>Description This course aims to look at some of the major issues and events of the world. There is an emphasis on personalities and conflicts. Employers and tertiary providers love the skills History fosters, such as; critical thinking about ideas, researching, processing and synthesising information, and the communication of good arguments.</p>		<p>Qualification</p> <ul style="list-style-type: none"> • NCEA Level 3 • UE approved subject • Course endorsements to Excellence
<p>Course Content Topics could include The Holocaust, The Cambodian Genocide, World Wars, Tudor England, Colonialisation, The French Revolution. These topics are co-constructed between the teacher and student. Students will explore:</p> <ul style="list-style-type: none"> • Research • Interpretation of historical sources • Appreciation of significant people, decisions and events and their relevance to New Zealand • Perspectives of a contested event 		<p>Assessment Types</p> <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards • All standards earn Literacy credits
<p>Prerequisites Level 2 History is preferred. English 201 or 202</p>	<p>Costs None</p>	<p>Literacy Level Students will need good literacy skills</p>
<p>Internals A.S 91434 Research an historical event or place of significance to New Zealanders, using primary and secondary sources (5 credits) LIT A.S 91435 Analyse an historical event, or place, of significance to New Zealanders (5 credits) LIT A.S 91437 Analyse different perspectives of a contested event of significance to New Zealanders (5 credits) LIT</p>		<p>Externals A.S 91436 Analyse evidence relating to an historical event of significance to New Zealanders (4 credits) LIT A.S 91438 Analyse the causes and</p>

	consequences of a significant historical event (6 credits) LIT
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HOSPITALITY (HTY300)		SOFT MATERIALS TECHNOLOGY
Description In Level 3 Hospitality, students explore making more complex food and beverage products. They learn about and practice coffee making skills and have learning experiences that help to improve their team player attributes, employability and time-management skills.		Qualification NCEA Level 3
Course Content Students become more independent and learn how to contribute and communicate effectively in a team. Students explore a range of recipes to refine cooking skills. Students plan, prepare, select, portion and finish dishes with a sense of urgency. They delve into the history and production of coffee and become more proficient in making multiple espresso milk-based beverages under real time pressures. <ul style="list-style-type: none"> • Demonstrate knowledge of coffee origin and production • contribute within a team or group which has an objective • Prepare and cook pickles, chutneys and preserves in a commercial kitchen • Prepare, assemble, and present complex sandwiches in a commercial kitchen • Interview in informal situations 		Assessment Types Level 3 ITO Unit Standards
Prerequisites Level 2 Hospitality essential to gain US167: Food Safety Practices in a Food Business and US17285: Prepare and Present Espresso Beverages Under Supervision	Costs A donation/contribution can be paid on your student's account. A fee may be charged for any optional component, trip etc. related to this course. Parental/guardianship permission would be sought prior to this fee being charged.	Literacy Level Students will need good literacy skills
Internals U.S 17284. Demonstrate knowledge of coffee origin and production (3 credits) U.S 9681 Contribute within a team or group which has an objective (3 credits) U.S 13331 Prepare and cook pickles, chutneys and preserves in a commercial kitchen (4 credits) U.S 13282 Prepare, assemble and present complex sandwiches for service in a commercial kitchen (2 credits) U.S 1296 Interview in informal situations (3 credits)		Externals This is an internally assessed course.
Additional Notes Students are expected to wear an apron and to tie long hair back during all practical lessons. Wearing closed toe shoes is strongly recommended for practical lessons.		

MĀORI (MAO300)		TE REO MĀORI
Description This course is for students who have already obtained NCEA Level 1 and 2 Te Reo Māori. It is a NCEA Level 3 course that enables students to increase their listening, reading, writing and speaking skills at an advanced level.		Qualification <ul style="list-style-type: none"> • NCEA Level 3 Te Reo Māori • UE approved subject • Course endorsements to Excellence
Course Content A variety of learning opportunities based on current learning contexts, modern themes and topics as well as the local history and knowledge of the people and the area.		Assessment Types <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards
Prerequisites NCEA Level 1 & 2 Te Reo Māori and entry is at the discretion of the Learning Area Leader	Costs None	Literacy Level Suits students at all literacy levels

Internals A.S 91650 Whakarongo kia mohio ki te ao Maori o te ao whanui (4 credits) LIT A.S 91651 Korero waihanga tuhi ki te ao Maori o te ao whanui (6 credits) LIT A.S 91654 Waihanga tuhinga whai take i te reo Maori o te ao whanui (6 credits) LIT	Externals A.S 91652 Panui kia mohio ki te reo Maori o te ao whanui (6 credits) LIT A.S 91653 Tuhi i te reo Maori o te ao whanui (6 credits) LIT
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MĀORI PERFORMING ARTS (MPA100/200/300)		LANGUAGES
Description This course will provide scope for the extension of knowledge and skills in the area of Māori Performing Arts.		Qualification Unit Standards Level 3
Course Content This course includes theory and practical focused on the historical research of Maori performing arts.		Assessment Types <ul style="list-style-type: none"> Internal Unit standards
Prerequisites Entry is at the discretion of the Learning Area Leader.	Costs None	Literacy Level Suits students at all literacy levels
Internals U.S 91650 Demonstrate knowledge and skills of performance components (6 credits) U.S 91651 Demonstrate knowledge and skills of people associated with MPA (6 credits) U.S 91654 Demonstrate knowledge of the origins of MPA disciplines (10 credits)		Externals There are no externals for this course

MATHEMATICS (MAT300)		MATHEMATICS
Description This course encourages the development of mathematical skills useful in employment and everyday situations.		Qualification <ul style="list-style-type: none"> NCEA Level 3 UE approved subject
Course Content The areas of study are: <ul style="list-style-type: none"> Linear Programming Simultaneous Equations Critical Paths Conic Sections Time Series 		Assessment Types Internal Level 3 Achievement standards
Prerequisites Students should have achieved 14+ Level 2 Mathematics credits	Costs None	Literacy Level Students will need good literacy skills for all courses
Internals A.S 91573 Apply the geometry of conic sections in solving problems (3 credits) NUM A.S 91574 Apply linear programming methods in solving problems (3 credits) NUM A.S 91576 Use critical path analysis in solving problems (2 credits) NUM A.S 91580 Investigate time series data (4 credits) LIT / NUM A.S 91587 poly systems of simultaneous equations in solving problems (3 credits) NUM		Externals There are no external exams for this course
Additional Notes Suitability for the course will be decided by consultation with the Learning Area Leader of Mathematics and the Year 13 Dean. A Graphics calculator is essential.		

MEDIA STUDIES (MED300)		MEDIA STUDIES
Description This subject helps students develop analytical skills, gain an awareness of the world around them and helps them to understand how media texts create meaning. Students will find this course useful as many occupations require applicants to have an understanding of the media and the wider society.		Qualification <ul style="list-style-type: none"> • NCEA level 3 • UE approved subject • Course endorsements to Excellence
Course Content <ul style="list-style-type: none"> • Production experience and planning and design skills through creating their own products • Understanding of genre • Analysis skills via media texts 		Assessment Types <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards
Prerequisites Achieved English Level 2	Costs None	Literacy Level Students will need good literacy skills
Internals A.S 91491 Demonstrate understanding of the meaning of a media text through different readings (3 credits) LIT A.S 91492 Demonstrate understanding of the media representation of an aspect of New Zealand culture or society (3 credits) LIT A.S 91494 Produce a design for a media product that meets the requirements of a brief (4 credits) LIT A.S 91495 Produce a media product to meet the requirements of a brief (6 credits) LIT A.S 91496 Demonstrate understanding of a significant development in the media (3 credits) LIT A.S 91497 Write a media text to meet the requirements of a brief (3 credits) LIT		Externals A. S 91490 Demonstrate understanding of an aspect of a media industry (4 credits) LIT A.S 91493 Demonstrate understanding of a relationship between a media genre and society (4 credits) LIT
Additional Notes Media Studies will help students to become more critically aware of the world around them		

MUSIC (MUS300)		MUSIC
Description This course allows students to create a personalised learning programme based on strengths and interests in music. Skills developed in Level 2 are also enhanced. Students will find this course useful if they are planning to pursue a career in music or just have a strong interest in music.		Qualification <ul style="list-style-type: none"> • NCEA level 3 • UE approved subject • Course endorsements to Excellence
Course Content Individual programmes are designed by the student in consultation with the teacher to best meet their musical needs and wants.		Assessment Types <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards
Prerequisites At least four year's instrumental/vocal training Achieved Music Level 2	Costs None	Literacy Level Students will need good literacy skills
Internals A.S 91416 Perform two programmes of music as a featured soloist (8 credits) A.S 91417 Perform a programme of music as a featured soloist on a second instrument (4 credits) A.S 91418 Demonstrate ensemble skills by performing two substantial pieces of music as a member of a group (4 credits) A.S 91419 Communicate musical intention by composing three original pieces of music (8 credits) A.S 91425 Research a music topic (6 credits) LIT A.S 91424 Create two arrangements for an ensemble (4 credits) A.S 91422 Analyse a substantial music work (4 credits) LIT		Externals A.S 91421 Demonstrate understanding of harmonic and tonal conventions in a range of music scores (4 credits)

A.S 91849 Compose three original songs that express imaginative thinking (8 credits)	
Additional Notes Students must receive either private or itinerant lessons on their chosen instrument.	

PHYSICS (PHY300)		SCIENCE
Description Physics provides the essential problem-solving skills and conceptual understanding required to progress in careers such as engineering, construction, medicine, pharmacy, physiotherapy, aviation and electronics. The course builds on concepts covered in Level 2 Physics.		Qualification <ul style="list-style-type: none"> • NCEA level 3 • UE approved subject • Course endorsements to Excellence
Course Content <ul style="list-style-type: none"> • Mechanics - momentum, force and motion, rotation, simple harmonic motion • Electromagnetism - DC and AC electricity, capacitance, magnetism • Wave motion - travelling and standing waves, interference, Doppler effect 		Assessment Types <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards
Prerequisites <ul style="list-style-type: none"> • PHY200 • MAT200 	Costs None	Literacy Level Students will need good literacy skills
Internals A.S 91521 Carry out a practical physics investigation to test a physics theory relating two variable in a non-linear mathematical relationship (4 credits) LIT A.S 91522 Demonstrate understanding of the application of physics to a selected context(3 credits) LIT		Externals A.S 91523 Demonstrate understanding of wave systems (4 credits) LIT A.S 91524 Demonstrate understanding of mechanical systems (6 credits) LIT A.S91526 Demonstrate understanding of electrical systems (6 credits) LIT
Additional Notes Students taking Physics can also do any of the other sciences offered by the school		

PHYSICAL EDUCATION BIOPHYSICAL (PEB300)		PHYSICAL EDUCATION
Description Using the knowledge skills and attitudes gained in Level 2 students will be challenged to critically think about Physical Education in their lives, their community and society. They will take action to enhance the wellbeing of themselves and others. Students with a keen interest in sport, fitness, leisure and recreation will enjoy this course. Those wishing to go on to tertiary study or a career in this area, the Health sector or Event management could take this course.		Qualification <ul style="list-style-type: none"> • NCEA level 3 • UE approved subject • Course endorsements to Excellence
Course Content <ul style="list-style-type: none"> • Biophysical principles • Physical performance of skills in a variety of settings • Performance programme evaluation • Skill analysis • Sociology of sport • Health promotion and evaluation • Leadership in physical activity context 		Assessment Types Internal Achievement Standards
Prerequisites Completion and passing at least 14 credits at PEB200 an advantage. Students new to this	Costs None	Literacy Level Suits students at all literacy levels

subject at the discretion of the Learning Area Leader.		
Internals A.S 91498 Evaluate physical activity experience to devise strategies for lifelong well-being (4 credits) LIT / NUM A.S 91500 Evaluate effectiveness of a performance improvement programme (4 credits) LIT / NUM A.S 91501 Demonstrate quality performance of a physical activity in an applied setting (4 credits) NUM A.S 91502 Examine a current physical event, trend or issue and its impact on New Zealand society (4 credits) LIT		Externals This is an internally assessed course

PHYSICAL EDUCATION SOCIOLOGY (PES300)		PHYSICAL EDUCATION
Description Using the knowledge skills and attitudes gained in Level 2 students will be challenged to work in a range of environments to develop the capacity for leadership and lifelong wellbeing. This course is suited towards those wishing to go into a job/profession where they will be working with other people and/or promoting physical activity.		Qualification <ul style="list-style-type: none"> NCEA level 3
Course Content <ul style="list-style-type: none"> Safety management in physical activity/outdoor education contexts Contemporary leadership principles Physical performance of skills in a variety of settings including the Tough Girl/Guy Challenge Impact of physical activity on lifelong wellbeing Assisting in running outdoor experiences 		Assessment Types Internal NZQA Standards
Prerequisites Completion and passing at least 14 credits at PEB200 or PES200 an advantage. Students new to the subject at the discretion of Learning Area Leader.	Costs None	Literacy Level Suits students at all literacy levels
Internals A.S 91498 Evaluate physical activity experience to devise strategies for lifelong well-being (4 credits) LIT / NUM A.S 91501 Demonstrate quality performance of a physical activity in an applied setting (4 credits) NUM A.S 91505 Examine contemporary leadership principles applied in physical activity contexts (4 credits) LIT A.S 91789 Devise strategies for a physical activity outcome (4 credits)		Externals This is an internally assessed course

PRODUCT DESIGN CONSTRUCTION (PRD300) (Previously Wood Technology WWK200)		HARD TECHNOLOGY
Description Year 12 Product Design Construction is intended to develop and extend the skills in Year 11 and 12. With particular focus on Computer Aided Design and Manufacturing and advanced wood working techniques. This course equips students for tertiary education and future employment and recreational endeavours connected with the construction and design industries.		Qualification <ul style="list-style-type: none"> NCEA level 3
Course Content This is an internally assessed course offering Achievement Standards which can be gained at Achieved, Merit or Excellence. With teacher guidance, students plan a year's programme and have the opportunity to follow individual pathways suitable for their future education or career paths. This is a practical course that involves researching, planning, designing and making a product using CAD (Computer Aided Design) and CAM (Computer Aided Manufacturing). You will also use traditional wood working methods to an advanced level. You will focus on the below elements:		Assessment Types Internal NZQA Standards

<ul style="list-style-type: none"> • Development of design concepts • CAD – Advanced product design and development using LaserWorks, Adobe Illustrator and Fusion 360 • CAM – Laser Cutter and CNC Router • Workshop safety – general and machine bay • Hand tools, including hand-held power tools • Advanced fixed workshop machinery/equipment • Advanced wood working techniques 		
Prerequisites Students should have experience of Product Design Construction at Level 1 or 2.	Costs There is no charge for this course. Items the student makes and wants to take home will require payment towards materials, at the cost of \$80. Parental/guardianship permission is sought prior to a take-home fee being charged.	Literacy Level Suits students with a fair/good literacy levels
Internals A.S 91344 Implement advanced procedures using resistant materials to make a specified product with special features (6 credits) A.S 91356 Develop a conceptual design for an outcome (6 credits) A.S 91357 Undertake effective development to make and trial a prototype (6 credits)		Externals This is an internally assessed course

STATISTICS (MAS300)		MATHEMATICS TECHNOLOGY
Description This course encourages the development of mathematical skills which support employment in many different occupations. Tertiary studies in Biological Sciences, Health Sciences and Social Sciences often require a sound knowledge of Statistics.		Qualification <ul style="list-style-type: none"> • NCEA level 3 • UE approved subject • Course endorsements to Excellence
Course Content The areas of study are <ul style="list-style-type: none"> • Time series • Statistical inference • Probability Concepts • Linear Programming • Bivariate data • Probability distributions 		Assessment Types <ul style="list-style-type: none"> • Internal NZQA standards • External NZQA standards
Prerequisites 14+ Level 2 Mathematics Achievement Standards including a Statistics Standard (a pass in a Level 2 Mathematics External Standard is strongly preferred)	Costs None	Literacy Level Suits students with above average literacy levels
Internals A.S 91574 Apply linear programming methods in solving problems (3 credits) NUM A.S 91580 Investigate time series data (4 credits) LIT / NUM A.S 91581 Investigate bivariate measurement data (4 credits) LIT / NUM A.S 91587 poly systems of simultaneous equations in solving problems (3 credits) NUM		Externals A.S 91585 Apply probability concepts in solving problems (4 credits) NUM A.S 91586 Apply probability distributions in solving problems (4 credits) NUM
Additional Notes Suitability for the course will be decided by consultation with the Learning Area Leader of Mathematics and the Year 13 Dean. A Graphics calculator is essential.		

TOURISM (TOU300)		SOCIAL SCIENCES
Description The tourism industry is important for any student to study as it brings in foreign currency, allows for cultural exchanges between people and creates employment.		Qualification <ul style="list-style-type: none"> NCEA level 3
Course Content <ul style="list-style-type: none"> The structure of the New Zealand Tourism Industry is examined along with developmental organisations and supporting services Destination topics are offered: Australia; Pacific Islands; Regional New Zealand The economic significance of Tourism is described and analysed for the world and New Zealand economy 		Assessment Types <ul style="list-style-type: none"> Internal NZQA unit standards National certificate in Tourism NZST Assessments
Prerequisites None – TOU200 would be an advantage	Costs A fee may be charged for any optional component, trip etc. related to this course at approx. \$60. Parental/guardianship permission would be sought prior to the fee being charged.	Literacy Level This is an internally assessed course.
Internals U.S 18228 Demonstrate knowledge of specific New Zealand regions as tourist destinations (8 credits) U.S 18212 Demonstrate knowledge of New Zealand as a tourist destination (8 credits) U.S 24733 Demonstrate and promote a New Zealand tourist destination (5 credits) U.S 18211 Demonstrate knowledge of Australia as a visitor destination (5 credits)		Externals This is an internally assessed course

