WHANGAREI BOYS' HIGH SCHOOL



Curriculum Guide 2019







Vocational Pathways

CREATIVE

- Actor
- **Advertising Executive**
- Animator Artist
- Copywriter

Musician

- **Fashion Designer**
 - **Publisher**
 - Stage/Set Designer

Photographer

Graphic Designer Web Designer



Vocational Pathways

SOCIAL AND **COMMUNITY SERVICES**

- **Ambulance Officer**
- Chiropractor
- Counsellor
- Dentist
- Doctor
- Educator
- Osteopath
- **Physiotherapist**
- Surgeon
- Social Worker



Vocational Pathways

SERVICES INDUSTRIES

- Aviation
- **Bar Manager**
- Baker Chef
- Customs Officer Firefighter
- Hairdresser
- Hotel Manager
- Police Officer
- **Retail Salespersor**
- **Restaurant Manager**
- **Travel Agent**



Vocational Pathways

PRIMARY INDUSTRIES

- Animal Attendant
- Beekeeping
- Dairy Farmer
- Ecologist
- Forestry
- Fishery Officer
- Horticultural Worker Landscape Gardener
- Marine Biologist
- Microbiologist Winemaker
- Veterinarian



Vocational Pathways

CONSTRUCTION AND INFRASTRUCTURE

- Architect
- Builder
- Carpenter Driller
- Electrician
- Glazier Mining
- Planner
- Plumber Roading
- Roofing
- Surveyor

Vocational Pathways

MANUFACTURING AND TECHNOLOGY

- Automotive
- **Boat Builder**
- **CAD Operator**
- Designer
- Engineer
- Fabrication
- Machine Operator
- Photographer
- Programmer Technician
- **Telecommunications**
- Website Developer



Welcome to our Curriculum Guide 2019

This publication contains all courses for one year level at Whangarei Boys' High School. Other year levels are available online at www.wbhs.school.nz or by request. After careful consultation with parents/ caregivers and following academic guidance with Whanau Teachers and/or Deans, our students are able to take a long term view to their academic planning, to see how subject areas develop and where they lead. To this end, subjects are laid out by year levels, containing to-the-point descriptions of the subject and in the case of the senior year levels, concise statements of the assessments for the subject. It is important to note that in the senior school, the listed subjects run conditional on the number of students taking that class. During the academic guidance process, students may select a subject which, due to very low numbers, may not be included in the 2019 timetable. In those cases, students will be asked to re-select. Acceptance in a subject may, in some cases, be dependent on a student's level of positive engagement with learning.

At Years 11 through to 13, all Achievement Standards and Unit Standards credit to the National Certificate of Educational Achievement at Levels 1, 2 or 3. Subjects considered compulsory in the senior school are English and Mathematics at Year 11.

The Curriculum broadens at senior level to include a number of courses, which offer students opportunities to follow specific vocational interests. The Gateway and Academy programmes are also available to senior students. They allow students to gain practical experience and assessment in the workplace. They also assist students to decide on their preferred type of employment and, in some cases, for employers to look at them as prospective employees. Many of these students are offered an apprenticeship.

The selection of subjects is an important process, one that requires the input of parents, caregivers and staff alike. We know that you and your son will take the time to examine carefully the information contained within.

Subject Selection Evening for students and parents/caregivers to discuss subject selection for 2019 will be held at **5.30 – 7.30pm** on **1 August 2018**, in the School Hall.

For current students subject selection can be entered via the KAMAR portal between **1 – 8 August 2018** and parents/caregivers will be sent details of how to do this. Otherwise, by appointment with the Deans.

For students new to the school in 2019, Deans are available by appointment for subject discussion and selection.

As the Curriculum continues to evolve and respond to new challenges and needs, we invite feedback and suggestions. Please feel free to contact the Curriculum Committee, via the Deputy Principal. The National Curriculum offers the flexibility for schools to tailor programmes to the strengths and needs of their communities.

We trust that along with our academic guidance, our Curriculum Guide 2019 will inform and assist you with the important planning and decision-making for future learning.

Yours sincerely

K. Gilbert-Smith PRINCIPAL

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NZQA FEES

INTRODUCTION

This information is important if you are a student, or a parent or caregiver of a student, at a secondary school in New Zealand entering:

- Standards on the National Qualifications Framework (NQF) including Unit Standards and Achievement Standards
- · New Zealand Scholarship

HOW MUCH ARE THE FEES IN 2019?

A flat fee of \$76.70 will be applicable. It covers entry into all NQF Standards. If you are an international fee-paying student (generally a non-resident of New Zealand), additional fees are payable.

STANDARD FEES

Enrolment	Fee
Entry for all NQF Standards	\$76.70 per candidate
Scholarship entries	\$30 per subject

INTERNATIONAL FEE-PAYING CANDIDATES

Enrolment	Fee
Entry for all NQF Standards	\$383.30 per candidate
Scholarship entries	\$102.20 per subject

WHO IS ELIGIBLE FOR FINANCIAL ASSISTANCE?

To apply for financial assistance, the applicant (normally the parent or caregiver of the candidate) must meet at least one of the following criteria:

- Be receiving a Work and Income or StudyLink benefit
- · Have a Community Services Card
- Have two or more children entered as candidates with fees more than \$200

FINANCIAL ASSISTANCE

	Eligible for beneficiary or income based assistance	Not eligible for beneficiary income based assistance
One child entering qualifications	\$20	Full fees
Two or more children entering qualifications	A maximum of \$30 per family	\$100.00 per child with a maximum of \$200.00 per family

More detailed information is available on www.nzqa.govt.nz



IMPORTANT DATES

2018

Wed	1	Aug	Subject Selection Evening 5.30pm - 7.30pm For students in Years 9 - 12 selecting 2019 subjects Senior staff, Head of Faculty staff, and Deans will be available to discuss subject selection with students and parents/caregivers
Thurs	2	Aug	Year 8 Open Evening 4.30pm - 7.00pm for students and parents/ caregivers Tours will commence at 4.30pm, and the formal presentation will be from 6.00pm - 7.00pm Subject displays will be in the School Hall
Wed	8	Aug	Final day for online subject selection via parent portal - for Years 9 - 12 students selecting 2019 subjects
Wed - Thurs	22 - 23	Aug	Year 8 Enrolment Interviews in the School Hall - bookings are made through the School Office
Mon - Fri	27 - 31	Aug	Senior Assessments trial examinations
Wed	26	Sept	Senior Interim Reports issued
Mon	29	Oct	Years 11 – 13 students issued with exam slips during period 1
Thurs	1	Nov	Senior Prize-giving 7.00pm (WGHS Gym)
Wed	7	Nov	NCEA examinations start
Thurs	6	Dec	Leavers' Ball
Fri	14	Dec	Junior Prize-giving (reports issued)

2019

Mon - Tue	21 - 22	Jan	All Year 13 Prefects/Senior Leaders – Leadership/Mentoring Training
Tue - Thurs	22 - 24	Jan	Years 9 – 13 Deans available for subject consultation for all returning students and new enrolments
Mon	28	Jan	Northland Anniversary Day All Year 9 Boarders and Hostel Prefects in Carruth House by 3.00pm
Tue	29	Jan	Years 9 & 13 students attend school. Powhiri at 9.00am Years 10 – 13 Deans available at 11.00am for course changes
Mon	4	Feb	All students attend school
Wed	6	Feb	Waitangi Day

Useful Websites

Vocational Pathways – www.youthguarantee.net.nz

Careers New Zealand – www.careers.govt.nz

 $Occupation\ Outlook\ app-https://play.google.com/store/apps/details?id=com.fronde.occupationaloutlook\&hl=en\ Just\ the\ Job-www.justthejob.co.nz$

Student loans and allowances - www.studylink.govt.nz

Fees Free, Tertiary Education Committee - www.feesfree.govt.nz



ACADEMIC COURSES 2019

POINTS TO NOTE	FACULTY	YEAR 9	YEAR 10	YEAR 11 - LEVEL 1	YEAR 12 - LEVEL 2	YEAR 13 - LEVEL 3
YEAR 9 Students study English, Science, Social Studies, Mathematics, Physical	The Arts	* Art * Drama * Music	*Art *Drama *Music	Art Digital Art Drama Music	Art Design Art Painting Photography Drama Music	Art Design ⁺ Art Painting ⁺ Photography ⁺ Drama ⁺ Music ⁺
Education, Health and Materials Technology for the full year. Te Reo Māori and a choice of either Art, Drama or Music, are studied for half a year.	Health & Physical Education	✓ Health ✓ Physical Education * Outdoor Education * Sports Specific Training	✓ Health✓ Physical Education* Outdoor Education* Sports Specific Training	Health Physical Education Physical Well-being Outdoor Education Personal & Social Development	Health Physical Education Physical Well-being Outdoor Education Personal & Social Development	Health ⁺ Physical Education ⁺ Physical Well-being Outdoor Education Personal & Social Development
Students also select two option subjects* which are studied for half a year. YEAR 10 Students study six compulsory subjects and three option subjects*. Please select a spare subject.	Languages	✓English * Japanese * Languages via FarNet (by application) ✓Te Reo Māori * Te Reo Rangatira ESOL	 ✓ English * Japanese * Languages via FarNet (by application) * Te Reo Rangatira ESOL 	✓ English English Language & Communication English Literacy Japanese Languages via FarNet (by application) Senior Māori Arts Te Reo Rangatira ESOL	English English Language & Communication Japanese Languages via FarNet (by application) Senior Māori Arts Te Reo Rangatira ESOL	English + English Language & Communication Languages via FarNet (by application) Senior Māori Arts Te Reo Rangatira + ESOL
YEAR 11 Mathematics and English are compulsory. Students study	Mathematics	✓ Mathematics	✓ Mathematics	✓ Mathematics Mathematics Bridging Mathematics Numeracy	Mathematics Mathematics Bridging	Calculus ⁺ Mathematics ⁺ Statistics ⁺
six subjects all year. Please select a spare subject. YEAR 12 Students select six subjects and a spare subject. It is important to identify	Sciences	* Agriculture/Horticulture √Science	*Agriculture/Horticulture √Science	Agriculture/Horticulture Science Science Science Bridging Primary Industries	Agriculture/Horticulture Science Biology Chemistry Physics Science Bridging Forestry Primary Industries	Agriculture/Horticulture (FarNet) + Science + Biology + Chemistry + Physics + Forestry Level 4 Professional Engineering
subjects that lead to the trades and those that prepare students for University Entrance. It is possible to repeat Level 1. YEAR 13 Students select five subjects and a spare. They may also select from Years 11 and 12	Social Sciences	* Start Your Own Business * The World of Money * Classical Studies	*The World of Business *Money Wise *Classical Studies √Social Studies	Accounting Business Studies Economics Personal Financial Management Classical Studies Geography History	Accounting Business Studies Economics Personal Financial Management Sales & Customer Service Tourism & Travel Classical Studies Geography History Psychology	Accounting + Business Studies + Economics + Personal Financial Management Sales & Customer Service Tourism & Travel Classical Studies + Geography + History + Psychology +
SUPPORTED LEARNING Extra learning support in a safe environment for those who do not cope with the structure of secondary school.	Technology	* Design & Visual Communication * Digital Technology ✓ Materials Technology	* Design & Visual Communication * Digital Technology * Electronics * Product Design * Materials Technology	Design & Visual Communication Digital Technology Digital Literacy Electronic Products Product Design Advanced Engineering Advanced Woodwork	Design & Visual Communication Digital Technology Electronic Products Product Design Pre-trade Engineering Pre-trade Woodwork Automotive Trades Engineering Trade Academy	Design & Visual Communication + Digital Technology + Pre-trade Engineering Pre-trade Woodwork Automotive Trades

[√] These subjects are compulsory * Option subjects + Approved subjects for University Entrance

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FarNet is learning via the internet and video conferencing. It is similar to Correspondence but with more tutor and class interaction. Students also receive one-on-one assistance from a trained teacher.

CAREER AREAS

The following information may assist with subject selection, however please note this is only a guide. Check with employers and/or tertiary providers to find out whether a subject is a requirement or is recommended.

CAREER / QUALIFICATIONS	LEVEL 1	LEVEL 2	LEVEL 3
Acting/Performing Arts (Many performing arts courses are now degrees so entry requires UE and an audition)	Drama Dance Maori Performing Arts	English & Drama Dance Media Studies Maori Performing Arts	English & Drama Dance Media Studies Maori Performing Arts
Agriculture/Farming/Fishing/ Forestry/ Turf Management/ Horticulture Straight to employment & ongoing study with the Industry Training Organisation (ITO) up to Dip. Farm Management level or Diploma or Degree from Polytechnics, Massey or Lincoln Universities	Agriculture/Horticulture Primary Industries Science Accounting Economics	Agriculture/Horticulture Primary Industries Trade Academy Placement Accounting Biology & Chemistry UE Literacy	Primary Industries Trades Academy Placement Accounting &/or Economics Agriculture or Horticulture Biology & Chemistry Business Studies
Animation Diploma e.g. Techtorium or UE e.g. AUT course	Art Digital Technology Science	Art & Digital Technology UE Literacy or English Mathematics Science STAR Course	Art Digital Technology Science STAR Course
Apprenticeships / Cadetships (including Building, Plumbing, Civil Engineering, Electrical, Painting, Bricklaying, Roofing, Plastering, Trade Engineer, Scaffolding, Automotive, Boat Building)	Science DVC Metalwork or Woodwork Science	Mathematics DVC Gateway or Trade Academy Placement Metalwork or Woodwork Science	Mathematics & English DVC Gateway or Trade Academy Placement Pre-trade Metal or Wood Science
Armed Services: Army, Navy, Air Force Specific requirements depend on the trade or career selected See www.defencecareers.mil.nz Officer Training requires UE	Science Digital Technology Metalwork or Woodwork	English & Mathematics Biology/Chemistry/Physics DVC Health Metalwork or Woodwork	University Entrance with relevant subjects, abilities and experience for Officer Training e.g. Medicine/ Professional Engineering Pre-trade Metal/Wood
Architectural Draughting Diploma courses - at least 35 credits in 3 subjects at L2, NorthTec course	DVC Science	English & Mathematics DVC Gateway	
Architecture UE and portfolio of art work	Art and/or DVC Science	Mathematics UE Literacy Physics	Art and/or DVC Calculus Physics, maybe Chemistry Language Rich Subject
Art/Design Certificates/Diplomas - good L1 or L2 results and a portfolio of work Degrees - UE and a portfolio	Art DVC Digital Technology	Art and/or DVC Art Design UE Literacy Digital Technology Mathematics	Art Art Design Digital Technology DVC Language Rich Subject
Automotive Engineering (Motor Mechanic)	Art (Car painting) Metalwork	Automotive Art (Car painting) Mathematics & Metalwork	
Building Professional Construction Economist Construction Management Degree courses - UE required	Woodwork Science	English & Mathematics DVC/Woodwork Geography Physics	Calculus Physics Business Studies Pre-trade Wood
Business Diplomas - 48 credits in best 4 L2 subjects Degrees - BCom, BBus UE required	Accounting Economics	English Mathematics Accounting Economics Business Studies	Statistics for Economics majors Business Studies Language Rich Subject
Catering/Chef/Cook/Baking • Apprenticeship • Diploma or UE course AUT or QRC in Paihia or Queenstown	Science	Chemistry Hospitality Sales & Customer Service Tourism	Hospitality Sales & Customer Service Tourism

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CAREER / QUALIFICATIONS	LEVEL 1	LEVEL 2	LEVEL 3
Cleaner National Certificate Cleaning	Personal Financial Management Science	Personal Financial Management Sales & Customer Service Science STAR Course	Business Studies Sales & Customer Service Science Gateway Placement
Communications/Journalism • Bachelor of Arts Degree - UE • Communications Degree • Certificate and Diploma L2 credits		English Classical Studies Geography & History Health & Psychology Media Studies	English Classical Studies Geography & History Health & Psychology Media Studies
Computing/ Computer Engineering	Digital Technology	English Mathematics Digital Technology	Mathematics/ Calculus Physics Language Rich Subject Digital Technology
Dentistry University Entrance Otago University - First year Medicine	Science	Biology Chemistry Health Physics Mathematics	Biology & Chemistry Health Physics Statistics
Engineering Professional Diplomas - 14 L2 credits in each of Mathematics and Physics and 14 credits in L1 English Degrees - UE plus extra requirements Calculus & Physics	Digital Technology Metalwork Science	English Geography Mathematics Metalwork Physics & Chemistry	Calculus Chemistry Language Rich Subject Physics
Flight Attendant Also known as Air Steward/ Cabin Crew	Languages Social Studies Geography Health	Health Geography Languages Psychology Sales & Customer Service Tourism	Health Languages Sales & Customer Service Tourism
Food Technology	Science	UE Literacy Mathematics Biology Chemistry	Biology Business Studies Chemistry Statistics
Graphic Design Diplomas & Degrees	Art Digital Technology	English / UE Literacy Art/DVC Art Design Photography Digital Technology	Art/DVC Art Design Digital Technology Photography
Hairdressing	Science Art	Art Sales & Customer Service Science	
Health Sciences Includes: Nursing, Med Lab Science, Occupational Therapy, Physiotherapy, Paramedics, Medical Imaging, Osteopathy, Medicine, Podiatry, Oral Health, Chiropractor	Science Health Human Biology (Te Kura)	Chemistry & Biology UE Literacy Health Physics Mathematics	Mathematics/Calculus/ Statistics Chemistry & Biology Health Physics Language Rich Subject
Hospitality (Hotel and Restaurant Work, Tourism, Hotel Reception) Diploma or Degree - Polytechnics, QRC	Accounting & Economics Science	Accounting & Economics Digital Technology English & Science Mathematics Sales & Customer Service Tourism	Accounting & Economics Mathematics Science Sales & Customer Service Tourism
Landscape Design/Architecture UE and a portfolio	Science Art/DVC Horticulture	Science Art/DVC Horticulture	English Art/DVC
Law Legal Admin course offered at AUT Degree - Victoria, Canterbury, Auckland & Waikato Universities	Classical Studies	Classical Studies UE Literacy Geography/History	Classical Studies English Geography/History
Logistics & Driving Traineeship, Diploma or Degree Manukau Institute of Technology, NorthTec, Unitec, AUT, Massey University	Digital Technology Gateway placement STAR Course Science	Mathematics Digital Technology Sales & Customer Service Science & UE Literacy	Business Studies Science



CAREER / QUALIFICATIONS	LEVEL 1	LEVEL 2	LEVEL 3
Manufacturing/Technology Straight to employment or Certificates, Diplomas Boat building, Jeweller, Civil or Chemical Engineer, Production Manager, Winemaker, Game Developer, Baker, Forensic Scientist, Operator	Mathematics Metalwork Woodwork Science	Mathematics Metalwork Woodwork Science UE Literacy or English Gateway	Pre-trade Engineering Mathematics Science
Medicine Doctor/Surgeon/Pharmacist Only offered at Auckland and Otago Universities	Science Human Biology	Biology & Chemistry Physics UE Literacy Mathematics	Biology & Chemistry Physics Language Rich Subject Mathematics/Calculus/ Statistics
Medical Laboratory Science	Science	Mathematics Biology Chemistry	Biology Chemistry Mathematics/Statistics
Music Self-employment or Degree Audition, portfolio	Music	Mathematics Music UE Literacy	Language Rich Subject Music
Office Administration Many courses are at degree level NorthTec, Unitec	Digital Technology	Mathematics Information Management STAR Course	
Photography Diploma & Degrees	Arts Digital Technology Visual Arts	UE Literacy Art Design &/or Visual Art Photography	Photography Art Design or Visual Art Photography
Psychology	Science	UE Literacy Biology & Chemistry Health & History Psychology	Language Rich Subject Health & Geography Psychology
Pilot	Science	English & Mathematics Physics	Calculus Physics
Retail National Certificate in Retail Butchery Apprenticeship Sales & Marketing Supply Chain Management	Accounting/ Economics Science	UE Literacy or English Gateway Mathematics Psychology Sales & Customer Service Tourism	Business Studies Statistics Sales & Customer Service Tourism
Sales & Retail	Accounting Economics Science	English & Mathematics Sales & Customer Service Business Studies	Sales & Customer Service Business Studies
Social Work	Social Studies Health History	UE Literacy Biology & Economics Health & History Psychology	Language Rich Subject Economics Health Psychology
Sound (Audio) Engineering	Science Music	Mathematics & Physics Music Digital Technology & Electronics	Physics Electronics Calculus
Sport and Recreation Diplomas or Degrees	Outdoor Education Physical Education Science	UE Literacy Biology & Mathematics Outdoor Education Physical Education Sales & Customer Service	Language Rich Subject Mathematics Physical Education Sales & Customer Service Science
Surveying Also consider Environmental Engineering, Landscaping etc.	Science	UE Literacy Mathematics Physics Geography	Calculus Geography Physics
Teaching For secondary teaching you need two teaching subjects to study at degree level		English, Mathematics, Science, History, Physical Education, French, Geography etc.	English, Mathematics, Science etc. Te Reo
Travel and Tourism	Geography Digital Technology Languages	Mathematics & English Digital Technology, Languages Geography / Tourism	Digital Technology Geography / Tourism Languages
Veterinarian/ Work with animals Degree level study is needed to become a vet. Diploma for Vet Nursing	Science	UE Literacy Mathematics Chemistry & Biology Physics (optional)	Language Rich Subject Mathematics Chemistry & Biology Physics (optional)



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ADDITIONAL PATHWAYS OF LEARNING

TE KURA (The Correspondence School)

This is offered to students who have New Zealand Citizenship and are wanting a subject where Whangarei Boys' High School does not have a class. Te Kura subjects are delivered via posted out work books and online learning. Boys work in a supervised classroom and have access to one-on-one teacher assistance.

FARNET

FarNet is available to domestic and international students. Students study via a mix of the internet and Google Hangout lessons with a distance tutor. This arrangement is useful where students have a clash of two subjects in their timetable and both complement their learning pathway. FarNet may also be available where Whangarei Boys' High School is not offering a subject.

Once a week the boys interact with their tutor and students in other schools. Other learning resources are accessed online during the rest of the timetabled classes so students may also complete work at home in their own time. FarNet students must regularly submit work to their tutors for feedback. The boys are supervised at all times and have access to one-on-one teacher support.

It is unusual for a student to be accepted into a FarNet subject after Week Seven in Term One. Most school subjects are available to one or two boys where there is sufficient demand from schools. Examples of subjects outside Whangarei Boys' High School subjects are:

Level 3 Agriculture, Horticulture & Equine Level 1, Level 2, & Level 3 Media Studies

Level 3 Social Studies Level 3 Web Design

Year 9 – 13 Languages (see Languages Faculty)

Level 2 & Level 3 Hospitality

Te Kura and **FarNet** students need to be self-directed and may need to meet pre-requisites.

Contact persons: Mrs Miller & Deans

GATEWAY

This is structured workplace learning, mostly for students in Years 12 and 13. They experience an unpaid placement in a work place which interests them for one day each week for six to ten weeks. The work placement may occur during the school holidays. Boys should express their interest in a Gateway placement when they select their subjects.

Examples are:

Trades EngineeringRetailElectricalPlumbingSport & RecreationBuildingComputingAutomotive

Contact person: Mrs Draper

TRADE ACADEMIES

Whangarei Boys' High School has funded places in several Trade Academies and these occur where the school works with a tertiary provider to transition a student into study and work. The places involve focused learning in the senior school for the entire year and boys take related school subjects, attend field trips, and in some cases attend a work placement. Others attend one or two days with a tertiary provider such as NorthTec, G&H Training or The Design School. To be considered for a Trade Academy place, boys should select subjects from one of the lines below and have a conversation with one of their Deans or Careers staff.

- Year 12 & 13 Pre-trade Engineering, and Automotive, and either Business Studies or Personal Financial Management
- Year 12 a full time Engineering Academy is offered to boys who know that they want an apprenticeship
 in the metal trades
- Year 12 & 13 Sales & Customer Service **and either** Business Studies **or** Personal Financial Management, **and** seriously consider Hospitality (FarNet)
- Year 11, 12 & 13 Primary Industries

Contact person: Deans



YEAR 12 DEANS' LETTER



There are no compulsory subjects in Year 12 and progression/admission to Year 12 courses depends on students meeting the criteria of each subject.

Students at this year level study six subjects. During this year students may also start working towards University Entrance by obtaining the required 5 reading and 5 writing literacy credits in various language rich subjects. However, we realise that university is not the pathway for all students. There are many courses, apprenticeships and other trade related areas students can, and often do, move on to. These may involve work placements throughout the year in areas of interest to ascertain suitability.

In order to achieve NCEA Level 2, students must gain at least 80 credits from either Achievement Standards or Unit Standards. 60 of the 80 credits must be at Level 2 or above, plus 20 credits from Level 1 or above. The Level 1 literacy and numeracy requirements must also be met (a minimum of 10 literacy credits and 10 numeracy credits at Level 1 or above).

Students may also have their NCEA Endorsed with either Excellence or Merit. To do this, they must achieve 50 credits at Excellence (for Excellence) or 50 credits at either Merit or Excellence (for Merit).

Individual subjects may also be Achieved with Endorsement. This requires that the student, in the subject, and in that year, gains:

- 14 or more credits at Merit or Excellence
- At least 3 credits must come from externally assessed standards and 3 from internally assessed standards. This does not apply to Physical Education, Religious Studies or Level 3 Visual Arts.

It is essential that students consider the qualification(s) they wish to gain during their secondary schooling. Combinations of subjects may lead to NCEA Level 2 and National Certificates on the NZQA Qualification Framework.

During subject selection guidance is available from Whanau Teachers, Deans, subject teachers, and Careers staff.

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YEAR 12 DEANS



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YEAR 12 ASSESSMENT INFORMATION

Grades that can be awarded for each Achievement Standard are:

- · Achieved with Excellence
- · Achieved with Merit
- Achieved
- Not Achieved

If a student meets the standard they receive the credits regardless of the grade awarded.

For Unit Standards a student will receive the following awards:

- Achieved
- Not Achieved

Depending on what subjects students choose to study, some will also be working towards the completion of:

- National Certificate of Automotive Trades Level 2
- National Certificate of Computing Level 2
- National Certificate of Electrotechnology Level 2
- National Certificate of Horticulture Level 2
- National Certificate of Performing Arts Level 2
- National Certificate of Retailing Level 2
- National Certificate of Tourism Level 2

For all assessment matters refer to the Senior Assessment Booklet updated and produced each year for distribution to senior students.

NEW ZEALAND QUALIFICATIONS AUTHORITY (NZQA)

NZQA administers the National Qualifications Framework (NQF), which is a system designed to recognise the attainment of knowledge, understanding and skills by all people in New Zealand. Framework qualifications are quality assured and nationally recognised.

Learners who register on the Framework are able to accumulate credits over time and at their own pace as they work towards a qualification.

NATIONAL CERTIFICATE OF EDUCATIONAL ACHIEVEMENT (NCEA)

NCEA is the main secondary school qualification in New Zealand for Year 12 students.

To gain an NCEA Level 2 qualification, a student must perform against pre-determined standards. These standards may be called Achievement Standards or Unit Standards. Each standard is allocated a certain number of credits. When a student has accumulated 80 credits, of which 60 are at Level 2 or above, plus 20 credits at Level 1 or above, and has met the Level 1 literacy and numeracy requirements (10 literacy credits and 10 numeracy credits), they may be awarded the NCEA Level 2 qualification.

VOCATIONAL PATHWAY AWARD

Gain 60 NCEA Level 2 credits relevant to your chosen pathway including 20 Level 2 credits from the industry related sector.



ARTS FACULTY

ART DESIGN (12ARD)

Students will learn and develop a range of skills from drawing and rendering through to graphic and 3-dimensional computer aided design. An interesting range of projects are designed to extend students and develop creative problem solving skills. Students will prepare a workbook and present a folio of work for external moderation.

Entry requirement: Level 1 Art, Level 1 Digital Art or HoD discretion. An understanding of basic computing skills in particular Photoshop/ 3D modelling programs an advantage. No changes into Art Design after Week 4.

Achievement Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
91310	Use drawing methods to apply knowledge of conventions appropriate to design	1	4
91315	Develop ideas in a related series of drawings appropriate to established design practice	I	4
91320	Produce a systematic body of work that shows understanding of art making conventions and ideas within design	E	12

Cost: Take home component of \$60, with an additional cost of \$20 for printing. This is to be paid at the beginning of Term 1 and credited to the student's printing account.

Contact persons: Mr A. Haag & Mrs V. Luders

ART PAINTING (12ARP)

Students will develop a wide range of skills and traditions in Art.

Entry requirement: NCEA Level 1 Art, Level 1 Digital Art or HoD discretion

Achievement Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
91311	Use drawing methods to apply knowledge of conventions appropriate to painting	I	4
91316	Develop ideas in a related series of drawings appropriate to established painting practice	I	4
91321	Produce a systematic body of work that shows understanding of art making conventions and ideas within painting	E	12

Cost: Take home component \$80 (approx.) There may be costs to help pay for field trips.

Equipment recommended: Students are advised to have their own set of art materials for homework

Contact person: Mrs V. Luders

DRAMA (12DRA)

This course involves a deeper understanding of practical theatre and theatre history with more self-directed learning through research into roles and genres.

Entry requirement: Participation in Show Quest is encouraged. Students must have achieved at least 8 credits at NCEA Level 1 Drama. The above may be waived by the HoD where a student has demonstrated an adequate level of performance skills.

Achievement Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
91213	Apply drama techniques in a scripted context	I	4
91214	Devise and perform a drama to realise an intention	1	5
91218	Perform a substantial acting role in a scripted production	1	5
91219	Discuss drama elements, techniques, conventions and technologies within live performance	E	4

Students will be offered one of the internal Performing Arts Technology standards. The external exam is optional and offers the opportunity for boys to gain Endorsement in Drama.

Cost: There will be a further charge necessary to help pay for field trips

Contact person: Ms F. Churcher

MUSIC (12MUS)

This is an academic course. It involves solo and group performances, continued development of composition and aural skills, combined with an in-depth study of musical works and score reading.

Entry requirement: A minimum of 10 credits gained from Level 1 Music and at least three years of instrumental tuition. Students must continue to take lessons throughout the year and participation in performance groups is encouraged. Students must be able to read music notation. Entry at the HoD Music's discretion where adequate music skills are demonstrated.

Achievement Standards selected from:

Level 2:	Title of Standard:	I or E *	CV *
91270	Performing two substantial pieces of music as a featured soloist	1	6
91274	Perform a substantial piece of music as a featured soloist on a second instrument	1	3
91272	Demonstrate ensemble skills by performing a substantial piece of music as a member of a group	I	4
91271	Compose two substantial pieces of music	1	6
91275	Demonstrate aural understanding through written representation	Е	4
91276	Demonstrate knowledge of conventions in a range of music scores	Е	4
91277	Demonstrate understanding of two substantial contrasting music works	Е	6
91273	Devise an instrumentation for an ensemble	1	4
91278	Investigate an aspect of New Zealand music	1	4

The external exams are optional and offer the opportunity to gain Endorsement in Music.

Contact person: Ms V. Hill

PHOTOGRAPHY (12PHO)

An introductory course for Photography investigating artist models, techniques and digital photography skills. Students will prepare a workbook and present a folio of work for external moderation.

Entry requirement: Level 1 Art, Level 1 Digital Art or HoD discretion Achievement Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
91312	Use drawing methods to apply knowledge of conventions appropriate to photography	I	4
91317	Develop ideas in a related series of drawings appropriate to established photography practice	I	4
91322	Produce a systematic body of work that shows understanding of art making conventions and ideas within photography	E	12

Cost: Students are expected to have their own SLR Digital camera or hire a camera from the Art Department. Charge for camera hire is \$100 with \$50 bond being refundable.

Take home component of \$60, with an additional cost of \$20 for printing. This is to be paid at the beginning of Term 1 and credited to the student's printing account.

Contact persons: Mrs C. Fleming & Mrs V. Luders

HEALTH & PHYSICAL EDUCATION FACULTY

HEALTH (12HLT)

This course develops the concept of hauora/well-being as we learn to explore a wide variety of health issues that face us in everyday life. Students will learn life skills and be equipped to move into people related careers.

Students will implement an action plan in the form of a health promoting project involving independent research within the community. They will also examine one concept of stress, safety for themselves and others, sexuality issues, and the effect of alcohol on driving.

Entry requirement: HoD discretion **Achievement Standards offered:**

Level 2:	Title of Standard:	I or E *	CV *
91237	Take action to enhance an aspect of people's well-being within the school or wider community	1	5
91239	Analyse issues related to sexuality and gender to develop strategies for addressing the issues	I	5
91235	Analyse an adolescent health issue	Е	5
91236	Evaluate factors that influence people's ability to manage change	1	5

Contact person: Mrs D. Cooper

OUTDOOR EDUCATION (120ED)

This course should provide learning experiences to develop personal and social skills for moving safely in a variety of settings.

These learning experiences should also develop the understandings and skills which underpin successful outdoor activity including the ability to deal with emergencies and an increase in the awareness of the need for conservation of the environment.

Outdoor Education activities include but are not limited to: abseiling, rock climbing, kayaking, caving, outdoor navigation, camping, Adventure Based Learning (ABL) and Outdoor First Aid.

Entry requirement: HoD discretion - a high standard of responsible behaviour is required and a genuine interest in outdoor education activities. Students do not need to have completed Level 1 OED to enter this course.

Achievement/Unit Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
431	Navigate in good visibility on land	1	3
20159	Gather and apply weather information to an outdoor recreation activity	1	2
425	Experience day tramps	1	3
426	Experience camping	1	3
20157	Top rope use rock climbing and abseiling	1	3
91334	Social responsibility	1	3
28392*	SCUBA dive in open water (optional only, cost: \$650 extra)	1	7

*A SCUBA diving course will be available as an optional extra and will incur a cost of \$650. It will be organised and supervised by WBHS staff and delivered by DiveHQ outside of school hours. Successful participants will receive Open Water Dive certification as well as 7 credits at NCEA Level 3.

Cost: \$230

To ensure the safe delivery of the trips the school invests in high quality gear and qualified, experienced staff. There is an associated cost to each student for the activities based course of \$230 for the year long programme. This cost will cover transport, safety equipment, and qualified, experienced staff who will ensure the safe delivery of all trips.

For students or families where there may be an issue of financial hardship, there are options to pay this amount over time or have a subsidy through the hardship fund. Please contact Yvonne Nees (y.nees@wbhs.school.nz) if you would like to organise a payment plan, or Mike Elliot (m.elliot@wbhs.school.nz) for access to the hardship fund.

Full payment, or a payment plan to pay the full amount by the end of Term 1, will need to be processed by the end of Week 3, Term 1.

An alternate free course is offered: Achievement/Unit Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
20159	Gather and apply weather information to an outdoor recreation activity	1	2
91334 (2.8)	Consistently demonstrate social responsibility through applying a social responsibility model in physical activity	I	3
91333 (2.7)	Analyse the application of risk management strategies to a challenging outdoor activity	I	3
27299	Describe benefits of participation in recreation in the local community	1	2
8567	Access sources of information for use in recreation	1	2
91282	Describe personal involvement in a social action related to rights and responsibilities	1	5

This programme has been designed to avoid cost to students, and has a large theoretical component. Unfortunately, there are no trips due to cost constraints.

Cost: Free

Contact persons: Mr S. Huurnink & Mr Jt. Thomas

PERSONAL & SOCIAL DEVELOPMENT (12PSD)

This course is an alternative course to Health. It supports students in their ability to develop personal well-being skills significant for becoming an up and coming fine man within our community. Interpersonal skills that support an individual's ability to work cooperatively with others are improved and challenged in each unit offered. A variety of health promotion agencies such as ACC Mates and Dates; Police programme Love Me Not; Upstander workshops; Drug Awareness campaigns will support the units we complete.

Students will be supported in taking responsibility for planning their own learning programme. This will coincide with practical experiences of going off campus to do research in an ECE service. Evaluation factors that influence changes will add to the scope of this course.

Entry requirement: HoD approval

Unit Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
7118	Manage your own learning programme	1	3
7117	Produce a plan to enhance own learning	1	2
10021	Describe the basic needs of children in an ECE service	1	3
3492	Write a short report (\$8.20 per student)	1	3
7123	Apply a problem solving method to a problem (\$17 per student)	1	2
Achievement Standard offered:			
91236	Evaluate factors that influence change	1	5
+	22		

Cost: \$25.20

Contact person: Mrs D. Cooper



PHYSICAL EDUCATION (12PED)

The course consists of both practical and theoretical elements and offers a comprehensive understanding of Physical Education at this level

Entry requirement: Achieved in all Level 1 Standards and HoD approval

Achievement Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
91327	Examine the role and significance of physical activity in the lives of young people in New Zealand	I	3
91328	Demonstrate understanding of how and why biophysical principles relate to the learning of physical skills	I	5
91329	Demonstrate understanding of the application of biophysical principles to training for physical activity	I	4
91330	Perform a physical activity in an applied setting	1	4
91331	Examine the significance for self, others and society of a sporting event, a physical activity, or a festival	I	4

Contact persons: Mr N. Smith & Mr Jt. Thomas

PHYSICAL WELL-BEING (12PWB)

This course aims to develop the knowledge, understanding, skills and attitudes needed to maintain and enhance personal health and physical well-being.

Entry requirement: HoD discretion **Achievement Standard offered:**

Level 2:	Title of Standard:	I or E *	CV *
91330	Demonstrate performance of a physical activity in an applied setting	1	4
Unit Sta	ndards offered:		
21793	Demonstrate correct technique when using basic gym equipment	1	2
21794	Demonstrate, instruct and monitor static stretching	1	3
21795	Demonstrate, instruct and monitor safe and correct use of cardiovascular exercise equipment	I	3
6571	Demonstrate relevance of principles of nutrition and health	1	2
21791	Relate human anatomy and movement to gym equipment and static stretching	1	4

Contact persons: Mr I. Morgan & Mr Jt. Thomas

LANGUAGES FACULTY

ENGLISH (12ENG)

A modular study of language and literature focusing on the requirements of the standards listed below.

- Writing skills (Expository and creative)
- Novel, poetry, short story and film studies
- Role-play/speaking

Entry requirement: 15 credits from Achievement Standards at Level 1, including one external Achievement Standard, or at HoD discretion

NB: In 2016 The University of Auckland introduced their Academic English Language Requirement (AELR). Applicants must gain a minimum of 17 credits in English at NCEA Level 2 and/or Level 3

Achievement Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
91098	Analyse specified aspect(s) of studied written text(s), supported by evidence	Е	4
91099	Analyse specified aspect(s) of studied visual or oral text(s), supported by evidence	Е	4

Level 2:	Title of Standard:	l or E *	cv *
91100	Analyse significant aspect(s) of unfamiliar written text(s) through close reading, supported by evidence	E	4
91101	Produce a selection of crafted and controlled writing	1	6
91102	Construct and deliver a crafted and controlled oral text	1	3
91104	Analyse significant connections	1	4
91107	Analyse aspects of visual and/or oral text(s) through close viewing and/or listening, supported by evidence	I	3

Contact person: Mr M. Nogher

ENGLISH LANGUAGE & COMMUNICATION (12ELC)

This course offers a mix of Achievement Standards and Unit Standards at Level 2. A significant part of the course is project based and incorporates a wide range of skills required in the workplace, including:

- Research
- · Reading texts for information
- · Report writing
- · Speaking to an audience

This course will prepare students for both English courses available at Level 3. It offers the opportunity to work cross-curricular with other subjects that the student is taking in Year 12.

Entry requirement: Students will be selected at HoD discretion

NB: In 2016 The University of Auckland introduced their Academic English Language Requirement (AELR). Applicants must gain a minimum of 17 credits in English at NCEA Level 2 and/or Level 3.

Achievement Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
91101	Produce a selection of crafted and controlled writing	1	6
91102	Construct and deliver a crafted and controlled oral text	1	3
91104	Analyse significant connections	1	4
91106	Develop personal responses to a selection of texts	1	4
91107	Analyse aspects of visual and/or oral text(s) through close viewing and/or listening, supported by evidence	I	3

Contact person: Mr M. Nogher

ESOL (12ESL)

English for Speakers of Other Languages (ESOL) assessments are conducted in English, which must not be the student's first language.

English Language (EL) Unit Standards offered:

Level 3:	Title of Standard:	l or E *	CV *
28052	Demonstrate understanding of detailed spoken instructions (EL)	I	5
28056	Read and understand texts on familiar topics (EL)	1	5
28057	Read and understand texts for practical purposes (EL)	I	5
28064	Present information on a familiar topic (EL)	1	5
28068	Write texts on familiar topics (EL)	1	5
28069	Write texts for practical purposes (EL)	1	5

Cost: IELTS examination \$365 (optional)

Contact person: Mr R. Atkinson

JAPANESE (12JAP)

The Japanese Level 2 course continues to build on the Level 1 course, with a focus on language skills, communication functions and Japanese culture

Entry requirement: Successful completion of the Year 11 course and/ or HoD discretion

Achievement Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
91133	Demonstrate understanding of a variety of spoken Japanese texts on familiar matters	Е	5
91134	Interact using spoken Japanese to share information and justify ideas and opinions in different situations	I	5
91135	Give a spoken presentation in Japanese that communicates information, ideas and opinions	I	4
91136	Demonstrate understanding of a variety of written and/or visual Japanese text(s) on familiar matters	E	5
91137	Write a variety of text types in Japanese to convey information, ideas, and opinions in genuine contexts	I	5

Contact person: Mrs D. Williamson

LANGUAGES via FarNet (12LANf)

These courses cater for students who wish to study languages that are not currently available in WBHS. The courses are also suitable for speakers of other languages who wish to gain qualifications in their first or second language. Dependent on their language ability, students can complete Level 2 internal and external assessments. FarNet offers a range of courses in French, German, Korean, Mandarin, Samoan, Spanish and Tongan. Please contact me if you require information about other languages you might wish to study.

Boys study in a supervised class with access to the required learning resources.

The course duration is mostly for a full year.

Contact person: Mrs D. Miller

SENIOR MĀORI ARTS (12SMA)

This course offers a combination of Māori Performing Arts standards, Māori Tourism, and Tikanga Māori standards. It is a composite Year 11 - 13 class and offers both numeracy and literacy standards.

Prior knowledge of Māori Performing Arts and Te Reo Māori is not essential, but is, to an extent, an advantage.

Unit Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
27126	Describe, and explain the purpose of, pūrakāu (gods, demigods) in accordance with ngā kōrero tuku iho	I	3
27127	Describe, and explain the purpose of, pakiwaitara in accordance with ngā kōrero tuku iho	I	3
27129	Explain the use of karakia in accordance with tikanga	1	2
13363	Demonstrate knowledge and skills of waiata-ā-ringa	1	6
16054	Describe the life and achievements of a Māori leader	1	2
13371	Demonstrate knowledge and skills of haka	1	6
13359	Demonstrate knowledge and skills of mõteatea	1	6

Cost: \$10

Contact person: Mr W. Cooper

TE REO RANGATIRA (12TRR)

This course is an in depth study of Te Reo Māori with greater emphasis on oral and written skills. These will include:

- · Oral fluency and communication skills
- · Reading comprehension and greater understanding
- · Research and essay skills
- A closer look at customs and protocols of classical and modern life

Entry requirement: Successful completion of Year 11 and/or HoD discretion. This course also includes a range of Unit Standards based on listening, speaking and writing on a range of topics.

Achievement Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
91284	Whakarongo (Listening)	1	6
91287	Tuhituhi (Writing)	1	6
91288	Waihanga Tuhi (Creative writing)	1	4
91286	Pānui (Reading)	1	4
91285	Kōrero (Speaking)	1	6

Māori Performing Arts Unit Standards: Students are able to select Level 1-3 MPA Unit Standards where applicable. These will be covered in the senior Te Reo classes unless modified since date of print.

Contact person: Mr W. Cooper

MATHEMATICS FACULTY

MATHEMATICS (12MAT)

12MAT is a course of study working towards six Level 2 Achievement Standards in Mathematics and Statistics. Successful completion of this course will ensure that students have the skills required to continue on to the Level 3 Statistics and Calculus courses.

Entry requirement: A student must have gained Achievement Standards 91027, 91028 and two Level 1 internally assessed Mathematics standards. Entry may be at the discretion of the HoF.

Achievement Standards offered: (this may change slightly)

Level 2:	Title of Standard:	l or E *	cv *
91261	Apply algebraic methods in solving problems	E	4
91262	Apply calculus methods in solving problems	Е	5
91257	Apply graphical methods in solving problems	1	4
91267	Apply probability methods in solving problems	Е	4
91264	Use statistical methods to make an inference	1	4
91259	Apply trigonometric relationships in solving problems	1	3

Equipment recommended: A calculator, preferably a Casio 9750 Graphic calculator

Cost: The ICAS Mathematics competitions (optional)

Contact person: Mr W. Litchfield



MATHEMATICS BRIDGING (12MAB)

12MAB offers Level 2 standards that are all internally assessed. It is for students who need time to develop their understanding and skills. This course may possibly lead to Year 13 Statistics (13MAS) if a student does well in all of the assessments and at the Mathematics HoF's discretion.

Entry requirement: Students who have gained 12 or more credits in Level 1 Mathematics and Statistics but have not achieved eligibility for the 12MAT course in Mathematics. Entry may be at the discretion of HoF.

Achievement Standards offered: (this may change slightly)

Level 2:	Title of Standard:	I or E *	CV *
91256	Apply coordinate geometry in solving problems	1	2
91258	Apply sequences and series in solving problems	1	2
91259	Apply trigonometric relationships in solving problems	1	3
91260	Apply network methods in solving problems	1	2
91268	Investigate situations involving elements of chance using a simulation	1	4
91269	Apply systems of equations in solving problems	1	2

Equipment recommended: A calculator, preferably a Casio 9750 Graphic calculator

Contact person: Mr W. Litchfield

SCIENCE FACULTY

AGRICULTURE/HORTICULTURE SCIENCE (12AHS)

More academic than Level 1, involving research, investigation and reporting skills.

Entry requirement: Achievement in Year 11 Agriculture/Horticulture Science or at discretion of TiC

Achievement and Unit Standards selected from:

Level 2:	Title of Standard:	l or E *	CV *
91290	Describe physical factors of the environment and techniques used to modify these for plant production	Е	4
91289	Carry out practical investigation with supervision	1	4
US21039	Demonstrate knowledge of the development of organic horticulture	I	10
91296	Produce a landscape plan	1	4
91293	Demonstrate understanding of livestock reproductive techniques in commercial production in New Zealand	I	4

The inclusion of some Unit Standards will be dependent on the abilities and interests of the students

Cost: There may be transport costs for field trips

Contact person: Mr D. Jennings

BIOLOGY (12BIO)

The course will cover theory and practical aspects of Biology with a total of 16-20 credits.

Entry requirement: 12 credits from Level 1 Science (must include the Biology Achievement Standard 90948) or at discretion of TiC

Achievement Standards selected from:

Level 2:	Title of Standard:	l or E *	CV *
91156	Demonstrate understanding of life processes at the cellular level	Е	4
91157	Demonstrate understanding of genetic variation and change	Е	4
91159	Demonstrate understanding of gene expression	Е	4
91153	Carry out a practical investigation in a biology context	1	4
91154	Analyse the biological validity of information presented to the public	1	3

Level 2:	Title of Standard:	I or E *	CV *
91155	Demonstrate understanding of adaptation of plants or animals to their way of life	I	3
91158	Investigate a pattern in an ecological community	I	4
91160	Investigate biological material at the microscopic level	1	3

Cost: There may be transport costs for field trips

Contact person: Mrs R. Thornton

CHEMISTRY (12CHE)

The content of this course is based on Quantitative Analysis, Redox Reactions, Organic Chemistry, Chemical Reactivity and Bonding.

Entry requirement: 14 credits from Level 1 Science (must include Chemistry Achievement Standard 90944, 90930 and Physics Achievement Standard 90940). It is recommended that students achieve at merit or better in Level 1 Acids and Bases. Those who do not qualify for the entry requirement need permission from TiC.

Achievement Standards offered:

Title of Standard:	I or E *	cv *
Carry out quantitative analysis	1	4
Carry out procedures to identify ions present in solution	1	3
Demonstrate understanding of bonding, structure, properties and energy changes	Е	5
Demonstrate understanding of the properties of selected organic compounds	Е	4
Demonstrate understanding of chemical reactivity	Е	4
Demonstrate understanding of oxidation-reduction	1	3
	Carry out quantitative analysis Carry out procedures to identify ions present in solution Demonstrate understanding of bonding, structure, properties and energy changes Demonstrate understanding of the properties of selected organic compounds Demonstrate understanding of chemical reactivity Demonstrate understanding of oxidation-	Carry out quantitative analysis I Carry out procedures to identify ions present in solution Demonstrate understanding of bonding, structure, properties and energy changes Demonstrate understanding of the properties of selected organic compounds Demonstrate understanding of chemical reactivity Demonstrate understanding of oxidation-

Cost: ICAS National Chemistry Competition \$8.50. There may be costs for resources.

Contact person: Mr A. Khambete

FORESTRY (12FOR)

This course is offered in partnership with the Forestry Industry Training Organisation. Some units are assessed by WBHS. The First Aid course and Chainsaw course are run by an external provider. The course credits to the National Certificate in Forestry. Students will be offered the opportunity of applying for a place in the Primary Industries Academy which provides extra field trips, an extended Gateway placement and the payment of most fees.

Entry requirement: 15 credits Year 11. A selection of the units below will be offered, including Chainsaw Safety and Operation, First Aid and Safety in the Workplace

Unit Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
22997	Demonstrate knowledge of principles of commercial forestry	1	5
6916	Demonstrate knowledge of the approved code of practice relating to chainsaw use	I	5
6917	Demonstrate basic chainsaw operation	1	5
17769	Demonstrate knowledge of general health, safety and environmental requirements in forestry	I	6
26551	Provide first aid for life threatening conditions	1	2
26552	Demonstrate knowledge of common first aid conditions and how to respond to them	I	1
6951	Demonstrate knowledge of selecting plantation trees	1	4
1227	Demonstrate knowledge of plantation forest harvesting	1	5
Level 3:			
1256	Demonstrate knowledge of ground based log extraction	1	4

All students are encouraged to participate in extra learning and assessment opportunities which are available through short courses and field trips.

Contact person: Mrs B. Van Rooyen

PHYSICS (12PHY)

A modular study of Physics designed for students who wish to pursue Physics in Year 13 or extend their skills base as a pre-requisite for other studies.

Entry requirement: 12 credits in Year 11 Science which must include AS90940 Mechanics, AS90935 Physics Investigation and 4 credits from Year 11 Mathematics which include AS91027 Algebra. It is recommended that students achieve at merit or better in Level 1 Mechanics before considering Level 2 Physics.

Achievement Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
91168	Take measurements of physical quantities and analyse data graphically to determine a relationship	I	4
91170	Demonstrate understanding of waves	Е	4
91171	Demonstrate understanding of mechanics	Е	6
91172	Demonstrate understanding of atomic and nuclear physics	1	3
91173	Demonstrate understanding of electricity and electromagnetism	Е	6

Cost: There may be cost for resources. **Contact person:** Mr S. Kumar

PRIMARY INDUSTRIES (12PIN)

Students will gain a deeper understanding of the technical aspects of the primary industries as preparation for employment and further study in that sector of the economy. The class will study a selection of standards from the list below. All students will be invited to apply for a place in the Primary Industries Academy and so undertake a relevant placement during the year. Achievement will count towards NCEA Level 2 plus the New Zealand Certificate in Primary Industry Skills (Level 2). Students in 12PIN will have an option of choosing Livestock farming, Dairy farming or Horticulture.

Entry requirement: Level 1 Primary Industries or at TiC discretion

Unit Standards selected from:

Level 2:	Title of Standard:	I or E *	cv *
31	Demonstrate knowledge of the New Zealand primary sectors	I	2
19106	Describe opportunities, advantages and disadvantages of rural development	1	4
19114	Demonstrate the social requirements for daily living in the rural industry	1	6
18191	Garden planning. Prepare and sow outdoor seed beds manually	1	3
19116	Grow and maintain plants in containers from seed	1	2
4	Describe hydration, nutrition and sleep in relation to well-being of workers	I	5
21556	Monitor and interpret weather information	1	2
2765	Plant trees and shrubs	1	4
20574	Identify plants	1	5
22174	Demonstrate knowledge of soils and fertilisers	1	5
561	Install, dismantle, and store temporary electric fences	1	2
18192	Demonstrate knowledge of how cows produce milk	1	2
24834	Replace a broken post, and repair a broken wire fence	1	5
23540	Demonstrate knowledge of hazards, hazard control, and the consequences of injury in a rural workplace	I	5
23541	Locate hazards, describe safety procedures, and demonstrate safe work practices in a rural workplace	I	5
2803	Maintain a documented work record of horticultural activities	1	5
22191	Demonstrate knowledge of factors which influence plant growth	1	5

Level 2:	Title of Standard:	l or E *	cv *
577	Dag and crutch sheep with prepared equipment	1	5
19112	Check and report on livestock	1	4

Cost: There may be costs associated with field trips

Contact person: Mr D. Jennings

SCIENCE BRIDGING (12SCB)

This course provides a pathway for students wishing to continue with the Sciences in Year 12. It covers all four learning areas and is for boys interested in Science who are not entering specialised Science topics e.g. Physics. Theoretical and practical aspects will be covered.

Entry requirement: 8 credits from Year 11 Science (11SCI) or 8 credits from Year 11 Science Bridging (11SCB)

Achievement Standards offered:

Level 2:	Title of Standard:	l or E *	cv *
91163	Demonstrate understanding of the chemistry used in the development of a current technology	I	3
91169	Demonstrate understanding of physics related to a selected context	I	3
91160	Investigate biological material at the microscopic level	1	3
91153	Carry out a practical investigation in a biology context, with supervision	1	4
91189	Investigate geological processes in a New Zealand locality	1	4

Cost: There may be cost for resources **Contact person:** Mrs L. Bourke-Heerikhuisen

SOCIAL SCIENCE FACULTY

ACCOUNTING (12ACC)

The emphasis at this level is on expansion of the Year 11 programme covering accounting systems in depth.

Entry requirement: 12 credits from Level 1 Accounting

Achievement Standards offered: A selection of at least 20 credits from below:

Level 2:	Title of Standard:	I or E *	CV *
91174	Demonstrate understanding of accounting concepts for an entity that operates accounting subsystems	E	4
91176	Prepare financial information for an entity that operates accounting subsystems	Е	5
291177	Interpret accounting information for entities that operate accounting subsystems	E	4
91179	Demonstrate understanding of an accounts receivable subsystem for an entity	I	3
91386	Demonstrate understanding of an inventory subsystem for an entity	1	3
91491	Demonstrate understanding of a topical accounting issue for decision-making	1	4

Contact persons: Ms K. Price & Mr R. Sharma



BUSINESS STUDIES (12BUS)

This course builds on concepts taught in Level 1 Business Studies, with the focus at Level 2 being on large New Zealand business. Students will also have the opportunity to work with their peers on their own business project, whilst contributing funds to a community organisation of their choice.

Achievement Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
90843	Demonstrate understanding of the internal operations of a large business	Е	4
90845	Apply business knowledge to a critical problem(s) in a given large business context	Е	4
90846	Conduct market research for a new or existing product	1	3
90847	Investigate the application of motivation theory in a business	1	4
90848	Carry out, review and refine a business activity within a community context with guidance	I	9

Contact person: Ms K. Price

CLASSICAL STUDIES (12CLS)

Why take Classical Studies? It introduces so much of what we have inherited from the Greeks and Romans, such as law, philosophy, language, literature, history, drama, sports, politics, art, oratory, medicine, architecture, sciences, and astronomy. We are proud that WBHS is the only school in New Zealand offering Classics Year 9 – Year 13.

The Year 12 course continues to build on the skills and knowledge developed in earlier courses. However, previous study of Classics is not a requirement.

Entry requirement: 12 credits from Level 1 Classics or English or similar. The course covers at least four of the following topics in depth.

Achievement Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
91200	The Iliad (The Trojan War)	Е	4
91201	Athenian art and architecture	Е	4
91202	The Persian Wars	1	4
91203	Athenian social and political life	Е	6
91204	A research topic of cultural comparisons	1	6

Contact person: Mr S. Crawford

ECONOMICS (12ECO)

This course focuses on macro-economics and explores New Zealand economic history. It deals with economic issues that affect the whole economy. In this course students will: understand how economic concepts and models provide a means of analysing contemporary New Zealand issues and understand how government policies and contemporary issues interact. The course is made up of four contemporary issues: Employment, Inflation, Growth and Trade.

Achievement Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
91222	Analyse inflation using economic concepts and models	Е	4
91223	Analyse international trade using economic concepts and models	Е	4
91224	Analyse economic growth using economic concepts and models	Е	4
91225	Analyse economic unemployment using economic concepts and models	1	4
91227	Analyse how government policy and contemporary economic issues interact	1	6
91226	Analyse statistical data relating to two contemporary issues	I	4

Contact person: Ms K. Price

GEOGRAPHY (12GEO)

Students continue to develop skills and ideas introduced in the Level 1 course

Topics covered include:

- Natural and cultural interaction and impacts in Tongariro National Park
- Crime patterns in Chicago
- The causes and occurrence of malaria on a global scale
- Perspectives on marine reserves being created in the Bay of Islands
- Research into natural and cultural interactions in the Tongariro National Park

Skills and concepts are further developed so that a wider skills bank is generated over the course of the year's study.

Entry requirement: 14 credits from Level 1 Geography, including Achievement Standard 91011 or 12 credits in Level 1 English (6 must be external) or HoD discretion

Achievement Standards selected from:

Level 2:	Title of Standard:	l or E *	CV *
91240	Demonstrate geographic understanding of a large natural environment	E	4
91243	Apply geography concepts and skills to demonstrate understanding of a given environment	E	4
91241	Demonstrate geographic understanding of an urban pattern	I	3
91244	Conduct geographic research with guidance	1	5
91246	Explain aspects of a geographic topic at a global scale	I	3
91245	Explain aspects of a contemporary New Zealand geographic issue	I	3

Cost: There may be a cost for fieldwork, maps and materials. Field trip to the Tongariro National Park.

Contact person: Mr J. Warren

HISTORY (12HIS)

The focus in Year 12 is Revolutions and Conflict, specifically relating to

History offers 14 internal and 9 external credits.

Topics studied are:

- · The Russian Revolution
- The Cold War and the spread of Communism
- Research topic on an historical event in the Cold War

Students will gain skills in essay writing, independent research and

Achievement Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
91229	Carry out an inquiry of an historical event or place, of significance to New Zealanders	I	4
91230	Examine an historical event, or place of significance to New Zealanders	1	5
91231	Examine sources of an historical event that is of significance to New Zealanders	Е	4
91232	Interpret different perspectives of people in an historical event that is of significance to New Zealanders	I	5
91233	Examine the causes and consequences of a significant historical event	Е	5

Cost: Field trip costs as applicable **Contact person:** Mr R. Burrows

PERSONAL FINANCIAL MANAGEMENT (12PFM)

Personal Financial Management offers study in the area of consumer finance and money management in today's world. The course is designed to continue to educate students on a responsible personal management path. Students continue to develop their competencies in setting financial goals and personal budgets, taxes, debt and ways to avoid/reduce debt, and be able to demonstrate knowledge in investment and insurance policies. By the end of the course students will have further developed their knowledge that will set them firmly on the path to financial independence.

Unit Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
24695	Explain taxation and other deductions relating to personal income	1	2
24699	Make an informed decision relating to personal income and explain its consequences	I	2
24707	Set a personal financial goal and plan its implementation	I	3
28094	Produce a balanced budget and adjust the budget to reflect changing financial circumstances	I	3
28096	Evaluate and select insurance product types in relation to events for personal finances	I	3
28097	Evaluate and select personal banking products and services in relation to personal financial needs	I	3
28092	Analyse the effect of significant life events at different life stages on personal financial income	I	3

Contact persons: Ms K. Price & Mr T. Yung

PSYCHOLOGY (12PSY)

Psychology is the scientific study of human thought, emotions and actions. It helps us understand how we and others behave and explores questions such as:

- Why do people harm others? Looking at aggression
- Why do people do bad things? Forensic psychology and criminal profiling
- How does culture influence behaviour? Sports psychology Holistic psychology
- What is the nature of intelligence? Organisational psychology

Developing understanding in these human facets is part of what forms our empathy and skills for living our lives.

In this course students will be introduced to the big ideas around human behaviour and then use the scientific method to test theories.

Topics covered include:

- Biological researchers look at how chemical and neurological processes affect us
- Behaviourists look at how the environment conditions us
- Cognitive psychologists examine the mind as an informationprocessing machine
- Psychodynamic psychologists look at our hidden desires and impulses
- Humanists see people holistically as unique beings with the ability to reach our full potential

All Psychology credits count towards UE entrance in reading

Entry requirement: 10+ credits in NCEA Level 1 English Achievement Standards or HoD discretion

Achievement Standards selected from:

Level 2:	Title of Standard:	l or E *	CV *
91839	Demonstrate understanding of psychological approaches	1	6
91841	Demonstrate understanding of the methods used in psychological research	1	4
91840	Demonstrate understanding of a psychological debate	1	3
91842	Demonstrate understanding of how theory is used in fields of psychological practice	I	5

Level 2:	Title of Standard:	l or E *	CV *
91843	Demonstrate understanding of ethical principles in psychological practice in Aotearoa/New Zealand	I	3
91265	Conduct an experiment to investigate a situation using statistical methods (in psychological context)	I	3

Contact person: Mr D. Moore

SALES & CUSTOMER SERVICE (12SCS)

This class helps students move toward a qualification and employment in retail. Students will learn a variety of skills in this subject which will be of value to employers. These include selling and customer service skills, advanced communication skills and problem solving skills.

Entry requirement: Open entry at discretion of HoD/TiC

Additional qualification: New Zealand Certificate in Retail Level 2

Unit Standards offered:

Level 2:	Title of Standard:	I or E *	cv *
57	Provide customer service in given situations	1	2
62	Maintain personal presentation in the workplace	1	2
1277	Communicate information in a specified workplace	1	3
11968	Knowledge and legislation applicable to the sale of goods and services	1	4
402	Demonstrate knowledge of the retail sector in New Zealand	1	2
405	Demonstrate knowledge of customer shopping and buying motives	1	3
11958	Demonstrate knowledge of stock management procedures and systems	1	4
Level 3:			
376	Employ customer service techniques for differing customer behaviours	1	2

There may be an opportunity to earn additional credits on a Gateway work placement.

Contact persons: Ms L. Cook & Ms K. Price

TOURISM & TRAVEL (12TOU)

Want to work in a dynamic industry? Have fun and travel? Then Tourism is for you. This is New Zealand's biggest employer. This course works towards a National Certificate in Tourism. There is a field trip and industry visits.

Entry requirement: Open entry at HoD/TiC discretion

Additional qualification: National Certificate in Tourism Level 2
Unit Standards offered:

ome standards offered.				
Level 2:	Title of Standard:	I or E *	CV *	
24727	Describe and compare impacts of tourism on the physical environment	I	3	
24728	Demonstrate knowledge of work roles in tourism	1	3	
24729	Demonstrate knowledge of world tourist destinations	1	4	
24730	Demonstrate knowledge of the business of tourism	1	4	
24731	Demonstrate knowledge of destination New Zealand	1	4	
24732	Demonstrate knowledge of tourist characteristics and needs	1	3	
Level 3:				
17788	Identify and explain history of natural attractions and significant sites	1	5	
17384	List and use a range of Te Reo	1	3	
24725	Describe and analyse the economic significance of Tourism Workbook	1	4	

Cost: There may be a cost for field trips **Contact persons:** Ms L. Cook & Ms K. Price



TECHNOLOGY FACULTY

AUTOMOTIVE TRADES (12AUT)

Students become proficient in:

- · Safe working practices and workshop protocol
- Basic motor vehicle components and systems
- Vehicle servicing
- · Workshop tools and equipment
- Two and four stroke, petrol and diesel engine cycles and operation

This course also includes a work placement through Gateway, gaining base skills, trade vocabulary and an insight into commercial work quality and pace. Students may be selected for a Safe Trades Course. Students may also apply to be part of the Trade Academy programme.

Entry requirement: Completion of an application form from the Technology Faculty. Preference to those who have completed Year 11 Advanced Engineering.

Additional qualification: Level 2 Unit Standards credit towards the National Certificate in Automotive Trades Level 2

Assessment: NorthTec Automotive Unit Standards, automotive component study assignment, an end of year examination

Unit Standards offered but not confined to:

Level 2:	Title of Standard:	l or E *	CV *
16113	Safety	1	2
3856	Emergency procedures	1	2
231	Two and four stroke, petrol & diesel engine cycles	1	4
247	Prepare a vehicle or machine for use and shut down after use	1	2
229	Location and function, systems and components	1	4
21682	Oxy-acetylene welding	1	2
21675	Demonstrate knowledge of automotive batteries	1	2
233	Service an automotive battery	1	2

Equipment required: 2B8 hardcover workbook and a 30 page A4 clear file

Contact person: Mr A. King

DESIGN & VISUAL COMMUNICATION (12DVC)

The course of DVC is structured around three areas:

- Graphics Communication and Design
- Environmental Design and Architecture
- · Technological and Product Design

Year 12 DVC is a programme for students who are serious about DVC and are aiming at NCEA Level 3 the following year.

A design brief approach is used for most problems throughout the course to ensure students fully explore the design process, develop broad graphics communication skills and start to appreciate good design. Skills in conceptual sketching, design development and refinement, production drawing and presentation will be developed through the course. Modelling is also an integral part of proving design viability. The use of CAD programmes is an integral component of this subject.

Entry requirement: Year 11 DVC

Qualifications: Assessment activities lead to the National Certificate of Educational Achievement Level 2. Students will attempt Level 2 Achievement Standards worth a total of 22 credits.

Equipment required: Set squares, compasses, pencils etc, for use at home and school, and an A3 visual diary

Cost: Take home component \$30 (approx.)

Contact person: Mr P. Yeoman

DIGITAL TECHNOLOGY (12DGT)

A mainly project based course focused on the development of the computer science skills required for further academic studies. Students will undertake a variety of real life projects:

- · Design a multi-media website
- Create a fast food ordering program
- Create a relational database to generate a variety of digital outcomes including mail merging
- Investigation of the shared information systems at WBHS to obtain external endorsement

Entry requirement: Successful completion of Year 11 Digital Technology course or HoD discretion

Achievement Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
91367	Demonstrate understanding of advanced concepts of information systems used to manage shared information	E	3
91368	Implement advanced procedures to produce a specified digital information outcome with dynamically linked data	I	6
91370	Implement advanced procedures to produce a specified digital media outcome	I	3
91372	Construct a plan for an advanced computer program for a specific task	1	3
91373	Construct an advanced computer program for a specific task	1	3
91377	Demonstrate understanding of local area network technologies	1	3
91378	Implement procedures for administering a local area network	1	4

Contact person: Mr J. Clark

ELECTRONIC PRODUCTS (12ELE)

This is a continuation of Year 11 Electronic Products and will suit students who have a compelling interest in microcontrollers (programmable chips) and their application in a variety of products. The course involves students investigating components and circuitry design. Students will present their work in portfolios that detail the research, design and the manufacture of the electronic product. Externally assessed standards have been included so that course endorsement is achievable at Merit or Excellence.

This course also has 12 literacy credits associated with it.

Entry requirement: Year 11 Electronics or HoD discretion

Achievement Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
91354	Undertake development brief to address an issue	1	4
91356	Develop a conceptual design for an outcome	1	6
91357	Undertake effective development to make and trial a prototype	1	6
91373	Construct an advance computer program for a specific task	1	3
91363	Demonstrate understanding of sustainability in design	Е	4
91359	Demonstrate understanding of the role of material evaluation in product development	E	4

Equipment required: 2 Ltr container, A4 folder, file dividers, A4 lined pad, clear file x 2, USB flash drive, and use of a laptop

Cost: Take home component \$70 (approx.)

Contact person: Mr J. Anderson

ENGINEERING TRADE ACADEMY (12ENAC)

This course is aimed at boys who have clearly decided on a career in Engineering or Automotive and are looking to transition from school into the workplace by the end of Year 12. Instead of selecting six subjects this is an integrated course which consists of one option line of literacy, one option line of numeracy and the remainder of the time completing engineering and automotive projects and the associated assessments. Boys who show good workshop practice will also be given the opportunity to gain workplace safety qualifications and attend a work placement. Students will work in groups for several projects.

Entry requirement: Selection into the course will require an interview with HoF and Deans. Students will need a history of consistently following accepted safety practice in the workshop and the ability to work co-operatively and productively with others. The course will run from 11.30am until 5.00pm instead of normal school hours.

Unit Standards offered:

A programme of assessments will be developed to suit the interests and abilities of the group and the practical projects they will undertake. These assessments consist of Unit Standards developed by Engineering and Automotive Industry Training Organisations. All students are expected to gain Level 2 NCEA.

Cost: No cost to students enrolled in Trade Academy

Contact person: Mr P. Yeoman

PRE-TRADE ENGINEERING (12PTE)

Students will have the opportunity to learn and apply practical design to set projects while developing confidence in the use of trade skills such as welding, brazing, oxy-acetylene cutting and basic machine tool operation. This emphasis is consistent with the Technology Faculty's approach to prepare students for today's employment opportunities.

Practical projects are created to be included in a student's employment portfolio. All Unit Standards count toward a career in Mechanical Engineering.

Entry requirement: Year 11 Advanced Engineering (Metalwork) gaining 14 credits with Year 11 DVC being strongly recommended. All students will be asked to submit an application, available from the Technology Faculty, and if selected will be interviewed by the Teacher in charge. With HoD discretion selected students will complete a work placement through the Gateway programme and may be offered a Safe Trades Course.

Unit Standards offered (compulsory):

Level 2:	Title of Standard:	l or E *	CV *
21911	Demonstrate knowledge of safety on the engineering worksite	1	1
2395	Select, care and use engineering hand tools	1	4
4433	Select, care and use simple measuring devices	1	6
4435	Select, use and care for engineering dimensional measuring equipment	1	3
4436	Select, use and care for engineering marking out equipment	1	4
2430	Draw and interpret sketches	1	4
2432	Construct engineering plane and geometric shapes	I	2

Equipment required: 2B8 hardcover workbook, 30 page clear file, safety glasses, overalls, and parts from a 10" or 12" child's two wheel bike

Cost: Take home component \$52 (approx.)

Contact person: Mr A. King

PRE-TRADE WOODWORK (12PTW)

Pre-trade Woodwork is an internally assessed course embracing a series of industry Unit Standard qualifications, as well as related assignments and skills. The project themes are designed to encourage students to make plans and decisions, analyse solutions and critique their work.

The course will suit those students intending to pursue a career in wood based industries including building, carpentry, joinery and cabinetmaking. Selected students will complete a work placement through the Gateway programme and may be offered a Safe Trades Course.

Entry requirement: Year 11 Advanced Woodwork. All students must submit an application and be interviewed by the Teacher in charge

Unit Standards offered:

Level 2:	Title of Standard:	I or E *	CV *
24354	Demonstrate knowledge of and apply safe working practices in a BCATS workplace	1	4
24357	Receive instructions and communicate information in relation to BCATS projects	1	4
24351	Demonstrate knowledge of and use specified fixed machinery in the construction of BCATS projects	I	6
24353	Demonstrate knowledge of and create sketches and drawings for BCATS projects	1	6
25921	Make a cupboard as a BCATS project	1	6

Cost: Take home component \$80 (approx.)

Contact person: Mr P. Yeoman

PRODUCT DESIGN (12PRD)

This subject builds on the learning outcomes of Year 11 Product Design. Year 12 Product Design is aimed towards students who have a good understanding of design concepts having taken either 11PRD or 11DVC. It will be ideal for students who are interested in design but favour more practical outcomes than 12DVC. The course will focus on design and build assignments with assessments based on Achievement Standards. Skills in conceptual sketching, design, development and refinement, presentation and production will form the basis of assessment. The use of CAD programmes and CNC machines are an integral part of this course and are used to enhance student outcomes.

Entry requirement: Successful completion of 11DVC or 11PRD or HoD discretion

Achievement Standards offered:

Level 2:	Title of Standard:	l or E *	CV *
91356	Develop a conceptual design for an outcome	1	6
91344	Implement advanced procedures using resistant materials to make a specified product with special features	I	6
91347	Demonstrate understanding of advanced concepts used to make products	1	4
91337	Use visual communication techniques to generate design ideas	E	3
91338	Produce working drawings to communicate technical details of a design	E	4

Equipment required: A3 visual diary, sketching equipment, standard and coloured pencils, USB flash drive

Cost: \$60 to cover take home materials

Contact person: Mr P. Yeoman













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