#### **MATHEMATICS**

## Mathematics for Services Academy Level 2 (12 MSV A)

Teacher to see: Mrs Duvenage

This is a course with a mix of Mathematics and Statistics internal standards. For students from the Services Academy.

Prerequisites: None

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	No
15	0	15		UE approved	Not applicable

Future possibilities: This course can lead to MATHS Level 3. This course makes allowances for absences due to Service Academy camps and trips. Future career possibilities include: Education (pre-school, primary), trades, manufacturing, mechanical engineering, hospitality, retail and tourism, sports, armed forces and police.

## Mathematics Level 2 (12 MAT A)

Teacher to see: Mrs Catchpole

This is a course with a mix of Mathematics and Statistics internal standards. Predominantly for students from MAT102 or MAS101

Prerequisites: 10+ Level 1 Mathematics credits from Achievement Standards.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	No
15	0	15		UE approved	Not applicable

Future possibilities: This course can lead to MATHS Level 3. This course is suitable for students in any of the academies. Future career possibilities include: Education (pre-school, primary), trades, manufacturing, mechanical engineering, hospitality, retail and tourism, sports, armed forces and police.

#### Mathematics Applications Level 2 (12 MAP A)

Teacher to see: Mrs Duvenage or Mrs Catchpole

A course containing internal Level 2 Achievement Standards. Allowing students to gain up to 14 Level 2 Mathematics credits. Also suitable for students who are looking to gain the 10 required NCEA Numeracy credits if incomplete from Year 11.

Prerequisites: Less than 10 Level 1 Maths credits and/or no Level 1 Numeracy.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	No
13	0	13		UE approved	Not applicable

Future possibilities: There is a possibility this course can lead to MAT302 in Year 13. Future career possibilities include: Trades, mechanical engineering, manufacturing, hospitality, retail and tourism, armed forces and police, sports, agriculture and horticulture.

#### Mathematics Level 3 (13 MAT A)

Teacher to see: Mrs Maxlow or Mrs Catchpole

A slower paced internal Level 3 Mathematics and Statistics course. Students will study a mixture of Level 3 Mathematics and Statistics Standards covering a broad range of ideas

Prerequisites: 10+ credits from MAT202 or MAS202

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	No
16	0	16		UE approved	Yes

Future possibilities: A good introduction to some higher level mathematics including research based statistical investigations. Education (pre-school, primary), trades, mechanical engineering, manufacturing, hospitality, retail and tourism, armed forces and police.

## Mathematics with Calculus Level 2 (12 MAC A)

Teacher to see: Mrs Catchpole

Mathematics with Calculus is a course aimed at students who would like to take Calculus at Level 3. This is a highly algebraic course. Students are expected to work towards a Merit or Excellence endorsement. It is strongly advised that students purchase a graphics calculator for this course.

Prerequisites: Merit+ in the Level 1 1.2 MCAT (Algebra) and 1.3 Tables, Equations and Graphs externals.

Credits		Standards	Cost	None	
Internal External Total		Achievement Standards	Course endorsement	Yes	
9	9	18		UE approved	Not applicable

Future possibilities: This course leads to Mathematics with Calculus and/or Mathematics with Statistics at Level 3. Future career possibilities include: Engineering (civil, chemical, structural), architecture, education (secondary), trades, armed forces and police, medicine, science (physicist), financial analyst, computer programmer (system design)

#### Mathematics with Calculus Level 3 (13 MAC A)

Teacher to see: Mrs Maxlow or Mrs Catchpole

A highly academic course. Students will be expected to be aiming for achievement at Merit and Excellence level. Students will need to possess strong algebra skills for successful completion of the course. It is strongly advised that students purchase a graphics calculator for this course.

Prerequisites: Merit+ in 2.6 Algebra and 2.7 Calculus externals from the MAC201 course.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
4	17	21		UE approved	Yes

Future possibilities: Future career possibilities include: Engineering (civil, chemical, structural), architecture, education (secondary), trades, armed forces and police, medicine, science (physicist), financial analyst, computer programmer (system design)

### Mathematics with Statistics Level 2 (12 MAS A)

Teacher to see: Mrs Catchpole or Mrs Maxlow

Mathematics with Statistics is a course aimed at students who would like to take Statistics or Mathematics at Level 3. There is a combination of Maths and Statistics standards. Students are expected to work towards a Merit or Excellence endorsement. It is strongly advised that students purchase a graphics calculator for this course.

Prerequisites: Merit+ in 1.12 Chance and Data external OR Achieved in 1.12 and Merit+ in 2 out of 3 of 1.10, 1.11 or 1.13 internals if from MAS101 OR Merit+ in all 3 1.10, 1.11, 1.13 if from MAT102 OR from MAC101 course with 10+ credits.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
15	4	19		UE approved	Not applicable

Future possibilities: This course is suitable for students wanting to take Level 3 Statistics. Future career possibilities include: Education, medicine, sports science, health-care and social work, media, law, accounting, scientific research, retail, tourism and Banking.

#### Mathematics with Statistics Level 3 (13 MAS A)

Teacher to see: Mrs Maxlow or Mrs Catchpole

A highly academic course containing Statistics and Probability standards. Students will be expected to be aiming for achievement at Merit and Excellence level. Students will need to possess strong statistical insight for successful completion of the course. It is strongly advised that students purchase a graphics calculator for this course.

Prerequisites: Merit+ in 2.12 Probability external or from MAC201 or MAC301.

Credits		Standards	Cost	None	
Internal External Total		Achievement Standards	Course endorsement	Yes	
12	8	20		UE approved	Yes

Future possibilities: This course is helpful for any students intending to study at tertiary level. Future career possibilities include: Education, medicine, health-care and social work, media, law, accounting, sports science, scientific research, retail and tourism, data scientist (statistician) and banking.

#### **PERFORMING ARTS**

## Dance Level 2 (12 DAN A)

Teacher to see: Miss Bartlett

A predominantly practical course. Students will be required to learn new dance techniques, perform in front of a live audience and refine their choreographic skills.

Prerequisites: Dance 101 or by approval of the HOD.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
16	4	20		UE approved	Not applicable

Future possibilities: The skills learnt in Dance would contribute to the career pathways of: Dance teacher, company choreographer, dance therapist, dance lecturer (tertiary), event producer, arts administration. Transferable Skills: Creative thinking, analyzing and discussing and collaboration.

#### Dance Level 3 (13 DAN A)

Teacher to see: Miss Bartlett

This is an advanced course. Students will perform a repertoire of dance, explore meaningful ideas in their choreographic practice and will be required to perform live often throughout the school year.

Prerequisites: Dance 201 or by approval of the HOD.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
18	4	22		UE approved	Yes

**Future possibilities:** The skills learnt in Dance would contribute to the career pathways of: Dance Teacher, Company Choreographer, Dance Therapist, Dance Lecturer(Tertiary), Event Producer, Arts Administration. Transferable Skills: Creative thinking, analyzing and discussing and collaboration.

## Drama Level 2 (12 DRA A)

Teacher to see: Miss Foulds

DRA201 is broken up into three live performances and an exam. The performance assessments include a full class production, devising an original piece of theatre and performing/directing a scene from a script. You will develop performance skills, confidence as well as learn about theatre history and theory.

Prerequisites: DRA101 or by approval of the HOD.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
14	4	18		UE approved	Not applicable

Future possibilities: Drama develops confidence and communication skills which are necessary for many careers; police, doctor, sales, teaching, management, lawyer, performing artist, retail, hospitality... and many more!

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## Drama Level 3 (13 DRA A)

Teacher to see: Miss Foulds

DRA301 is a fun but challenging course that focuses on a mixture of performance skills and theatre theory. High**lights include devising an original piece of theatre,** performing scripted scenes and being part of a full class production. The option to do the Drama Scholarship exam is also available to those willing to give it a go.

Prerequisites: DRA201 or by approval of the HOD.

Credits		Standards	Cost	Nil	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
14	4	18		UE approved	Yes

**Future possibilities:** Drama develops confidence and communication skills which are necessary for many careers; police, doctor, sales, teaching, management, lawyer, performing artist, retail, hospitality... and many more!

# Music Level 2 (12 MUS A)

This course consolidates musical knowledge from the previous year at the same time developing new practical and theoretical skills that will equip students with the necessary skills to continue study in Music the following year. Specifically these are (i) Aural (ii) Theory (iii) Composition (iv) Performance along with studying various conventions of music.

Teacher to see: Mr Nightingale

Teacher to see: Mr Nightingale

Teacher to see: Mr Grace

Teacher to see: Mr Grace

Prerequisites: Music 101.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
14	8	22		UE approved	Not applicable

Future possibilities: The course leads to Music 301 with all skills transferable from levels 2 to 3.

#### Music Level 3 (13 MUS A)

MUS301 is a University approved course of study. It consolidates knowledge acquired from the previous year including (i) performance skills, (ii) developing knowledge and understanding of music conventions (iii) aural awareness and application to standards offered such as composition, arranging and songwriting. This course will allow you to smoothly transition to tertiary study.

Prerequisites: Music Level 2

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
14	8	22		UE approved	Yes

Future possibilities: This course leads to any tertiary Music course either at University or other tertiary provider such as Unitec, SAE e.t.c

#### **SCIENCE**

## **Biology Level 2 (12 BIO AX)**

This course gives an introduction into different aspects of biology, from DNA to ecosystems. Students learn investigative skills while studying the growth of different food crops. Topics include genetic variation and change, gene expression, animal adaptations and biological investigations.

Prerequisites: Pass in Science 101 or success in the biology standards in Science 102.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
10	8	18		UE approved	Not applicable

Future possibilities: Related careers include conservation, health sciences, molecular science. Transferable skills include essay writing, data collection and interpretation, analyzing, investigating and collecting information.

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### Biology Level 2 (12 BIO A)

This course is designed as an introduction to different aspects of biology and leads onto the Level 3 Biology course. It has more internal assessments and has an emphasis on practical and investigative skills. Topics include microscopes, landscapes, genetic variation and animal adaptations.

Prerequisites: Consultation with your Science teacher from 2022

Credits		Standards	Cost	None	
Internal External Total		Achievement Standards	Course endorsement	Yes	
14	4	18		UE approved	Not applicable

Future possibilities: Related careers include laboratory technician, health sciences, animal health, conservation. Transferable skills include essay writing, data collection, investigation and collecting information.

## **Biology Level 3 (13 BIO AX)**

Teacher to see: Mr Grace

This course follows on from Biology 201 and looks at a range of topics in more depth. There is a high literacy demand in this course. Topics include how genetic variation leads to the formation of a new species, researching a socio-scientific issue such as the use of 1080 in New Zealand, human evolution and how animals control their temperature (homeostasis).

Prerequisites: Pass in Level 2 Biology.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
6	13	19		UE approved	Yes

**Future possibilities:** Transferable skills include essay writing, researching, data collection and interpretation, collecting information and analyzing. Related careers include: conservation, medical sciences, molecular biology, genetics, veterinarian.

# **Biology Level 3 (13 BIO AU)**

Teacher to see: Mr Grace

This course is designed for students who need a science to enable them to enter into tertiary courses. Topics include: human physiology, human evolution, practical investigation and research. This course requires all Achievement Standards to be passed in order to be UE approved.

Prerequisites: Entry is done on a case by case basis in consultation with your 2022 science teacher.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards, Unit	Course endorsement	Yes
16	4	20	Standards	UE approved	Yes

Future possibilities: Transferable skills include essay writing, researching, investigating, collecting and analysing data. Related careers include health, science professions and trades.

# **Chemistry Level 2 (12 CHE AX)**

Teacher to see: Ms Regan

This course contains standards on many of the main topics in Chemistry which are studied through to University. It is for a science student who wishes to pursue a career in which Chemistry is a part.

Prerequisites: SCI101 with an Achieved grade or higher in Acids and Bases.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
7	13	20		UE approved	Not applicable

Future possibilities: This course leads on to Level 3 chemistry and the practical skill of titrating is useful in laboratory work.

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## Chemistry Level 2 (12 CHE A)

Teacher to see: Ms Regan

This course is for students who will need some chemistry to support their tertiary learning or apprenticeship. Topics include investigations, oxidation-reduction and bonding.

Prerequisites: Science Level 1

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
10	5	15		UE approved	Not applicable

Future possibilities: Many of the practical skills learnt in this course will be helpful in jobs out in the real world such as titrating and the identification of ions.

#### Chemistry Level 3 (13 CHE AX)

**Teacher to see:** Ms Regan

This course leads directly into first year Chemistry at University. The topics covered are the same as in Level 2 Chemistry but with greater depth of knowledge.

Prerequisites: Chemistry 201 with two externals passed. Must have attempted the Level 2 organics and thermochemical principles exam papers.

Credits		Standards	Cost	None	
Internal External Total		Achievement Standards	Course endorsement	Yes	
9	15	24		UE approved	Yes

Future possibilities: This leads into future studies at University for Science, Health Sciences and Engineering.

## Chemistry Level 3 (13 CHE A)

Teacher to see: Ms Regan

This course is University approved but is more internal based with just one external. Topics include chemical processes around the world and oxidation/reduction.

Prerequisites: CHE201/202. Must have attempted one external, preferably thermochemical principles.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
9	5	14		UE approved	Yes

Future possibilities: This course will enable students to take Chemistry at a tertiary level.

#### Physics Level 2 (12 PHY AX)

Teacher to see: Mrs Holloway

In this course students study mechanics, electricity and magnetism and nuclear physics. Students also carry out a practical investigation, demonstrating their understanding of variables, data manipulation and graphing.

Prerequisites: Entry is done on a case-by-case basis and consultation with your science teacher.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
7	12	19		UE approved	Not applicable

Future possibilities: Possible careers: Engineering, Medicine, Dentistry, Veterinary Science, Research, Teaching. Transferable skills: Ability to collect and assess data, critical thinking, calculations.

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# Physics Level 2 (12 PHY A)

Teacher to see: Mrs Holloway

This level 2 physics course includes only one external assessment on electricity and magnetism. The rest of the course is made up of internally assessed standards in which students will study atomic and nuclear physics, carry out a physics investigation, and research a real world application of physics concepts. There is a time-dependent Level 3 Earth and Space Science standard available as part of this course.

This course is appropriate for students who are part of vocational academies.

Prerequisites: Entry is done on a case-by-case basis and consultation with your science teacher.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
14	6	20		UE approved	Not applicable

Future possibilities: Possible careers: Engineering, building, electrician, plumber and most other trades. Transferable skills: Ability to collect and assess data, critical thinking, calculations.

## Physics Level 3 (13 PHY AX)

Teacher to see: Mrs Holloway

A study of Mechanics (translational, rotational and simple harmonic motion), Waves, Modern physics and Electrical systems (DC and AC circuits).

Prerequisites: Entry is done on a case-by-case basis and consultation with your physics teacher. This will include success in the external exams for Level 2 Physics.

	Credits		Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
7	16	23		UE approved	Yes

Future possibilities: Possible careers: Engineering, auto mechanic, building, electrician, plumber and most other trades. Transferable skills: Ability to collect and assess data, critical thinking, calculations.

# Physics Level 3 (13 PHY A)

Teacher to see: Mrs Holloway

This course is designed for those students who are not intending to take Physics or Engineering at University. Students study content on waves and modern physics. This course is suitable for students who are part of vocational academies and gives the opportunity to earn 14+ credits including an external assessment.

**Prerequisites:** Entry on a case by case basis. This can follow on from Physics 201 or Physics 202. This course could also be suitable for students who are strong in maths, have good literacy skills, and are interested in Physics.

	Credits		Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
13	4	17		UE approved	Yes

Future possibilities: Possible career: Engineering, auto mechanic, building, electrician, plumber and most other trades. Transferable skills: Ability to collect and assess data, critical thinking, calculations.

#### Vocational Science Level 2 (12 SCV A)

Teacher to see: Mr Snitch

This is a science course for students for whom science is a requirement for future training. Students will cover topics such as learning how to use a microscope, investigating plant growth and investigating an Earth and space issue. This course is assessed entirely internally.

Prerequisites: Most students in the Service Academy take this course. Please discuss with Mr Snitch whether this course is right for you.

	Credits		Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	No
14	0	14		UE approved	Not applicable

Future possibilities: A number of careers in the trades require science to be taken at school.

# TE REO MĀORI

# Te Reo Māori Level 2 (12 TRM A)

Teacher to see: Whaea Pearl Snowden

Students will learn advanced skills in both written and communicative skills in Te Reo Māori. They will learn advanced skills to communicate about past, immediate and future activities. The programme aims to deliver a balance between academic and practical learning and consists of writing, speaking, listening and reading skills of Te Reo Māori.

Prerequisites: NCEA Level 1 Te Reo Māori 10 Literacy 10 Numeracy credits. NCEA Level 1 Te Reo Māori 18-24 credits = 3 Internal 1 External Exam Pānui or Tuhituhi.

	Credits		Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
12	6	18		UE approved	Not applicable

Future possibilities: Airlines, Biosecurity Officer, Flight Attendant, Policy Analyst, Surveyor, Consultant, Teacher.

#### Te Reo Māori Level 3 (13 TRM A)

Teacher to see: Pearl W Snowden

Students will learn extensive skills in both written and communicative skills in Te Reo Māori. They will learn to communicate extensively about past, immediate and future activities. The programme aims to deliver a balance between academic and practical learning and consists of writing, speaking, listening and reading skills of Te Reo Māori.

Prerequisites: NCEA Level 2 Te Reo Māori 18-22 credits = 3 Internal 1 External Exam Pānui or Tuhituhi

Merit and/or Excellence Endorsed

	Credits		Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
20	12	32		UE approved	Yes

Future possibilities: Conferencing and events, conservation officer, curator, economist, environmental consultant, ferries and cruise ships, flight attendants (cabin crew), landscape architect, teacher, tour guides, tourism operators, transport planner, travel agencies.

## Te Reo Rangatira Level 2 (12 TRR A)

Pouako: Whaea Samantha La Hood

Ka ako ngā ākonga i ngā pūkenga whānaui i roto i ngā pūkenga tuhi me ngā pūkenga whakawhiti kōrero o roto i Te Reo Māori. Ka ako rātou i te whakawhiti kōrero mo ngā mahi o mua, o mua, o mua, o meake nei. Ko te whainga o te kaupapa ki te kawe i te taurite i waenga i ngā akoranga mātauranga me ngā mahi ako, me ngā pūkenga Tuhituhi, Kōrero, Whakarongo me te Pānui i Te Reo Māori.

Akoranga Tōmua s: NCEA Tautmata 1 Te Reo Rangatira

Whakamana Kaiaka / Kairangi rānei

Mātauranga whānui		Paerewa	Utu	Kore	
A-roto	A-waho	Tapeke	Paerewa Aromatawai	Whakamana Whakamihi	Ae
17	9	26		UE approved	Ae

Nga mea ka taea: Huihuinga me nga huihuinga, Apiha Tiaki, Kaitiaki, Tohunga Ohaoha, Tohunga mo te Taiao, Waka waka me ngā Kaipuke Teretere, He Kaiawhina waka (kaiakina waka), He Tohunga Hoahoa Whenua, He Kaiako, He Kaiarahi Haerenga, He Kaiwhakahaere Tūruhi, He Māhere waka, He Tari Haere.

# 30 TECHNOLOGY

## Design and Visual Communication Level 2 (12 DVC A)

Teacher to see: Ms Bunt

Students build on their knowledge from Level 1 to create design solutions for architectural and spatial design contexts. Åkonga explore their own design style and develop their ability to accurately communicate visually their ideas through freehand sketching, instrumental drawing including CAD and modelling.

Prerequisites: Level 1 DVC and HOD discretion.

	Credits		Standards	Cost	\$20 specialist drawing equipment and supplies.
Internal	External	Total	Achievement Standards	Course endorsement	Yes
19	6	24		UE approved	N/A

Future possibilities: Creative design industries particularly Architecture, Interior, Landscape and Spatial Design.

#### Design and Visual Communication Level 3 (13 DVC A)

Teacher to see: Ms Bunt

This course establishes students as independent designers, developing their own individualised architectural solution. Ākonga will develop sophisticated visual communication techniques to accurately present their ideas in both freehand drawing methods and utilising CAD including Graphisoft, Techsoft, Sketchup and Adobe Creative Suite. Students have the opportunity to submit work for Scholarship in this course.

Prerequisites: Level 2 DVC or at discretion of the HOD.

	Credits		Standards	Cost	\$30 specialist drawing equipment
Internal	External	Total	Achievement Standards	Course endorsement	Yes
19	3	22		UE approved	Yes

Future possibilities: Creative design industries particularly Architecture, Interior, Landscape and Spatial Design.

# Digital Technology Level 2 (12 DGT A)

**Teacher to see:** Mr Semmons

The first half of this course is focussed on students learning how to apply creative digital media concepts. This includes Adobe Photoshop and Illustrator, design conventions, and website development skills. Ākonga will then learn how to manage data on Microsoft access and SQL. For the final standard, they will further develop their programming skills.

**Prerequisites:** Preferable to have successfully completed DGT101. Students with a passion for digital technology who have not taken the subject in Year 11 can also take the course with HOD permission.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
16	3	19		UE approved	Not applicable

**Future possibilities:** Students can acquire the knowledge and skills to specialise in a wide variety of careers or study options within the area of computer science and game design and development.

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# Digital Technology Level 3 (13 DGT A)

**Teacher to see:** Mr Semmons

The first half of this course is focussed on further developing their creative digital media skills. This includes Adobe Photoshop and Illustrator, design conventions, and website development skills. Akonga will need to show complex techniques and improvements from their previous digital outcomes. They will learn new skills in data management and programming and will have the opportunity to submit work for Scholarship in this course.

**Prerequisites:** Successful completion of Digital Technologies at Level 2 is strongly recommended. Students who have not taken the subject previously at senior school should see the teacher in charge.

	Credits		Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes

	16	3	19		UE approved	Yes
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**Future possibilities:** This course is essential for those students wishing to study computer science at university. It is also valuable for students interested in pursuing higher studies in other areas such as engineering and science.

# **Engineering Technology Level 2 (12 EGT U)**

This course is an advancement of skills from Level 1 Engineering. Students will develop higher level practical solutions in the workshop by making a range of engineered projects. These advanced skills are developed using engineering processes with workshop tools and equipment. Assessments include finished engineered products with a written component evidencing knowledge gained.

Teachers to see: Mr Course/Mr Scott/Mr Hine

Prerequisites: Students should have studied Level 1 Engineering or at HOD discretion.

	Credits		Standards	Cost	\$60 for materials used for take home projects.
Internal External Total		Unit Standards	Course endorsement	No	
20	0	20		UE approved	Not applicable

Future possibilities: Any mechanical engineering industry, general engineering, fitting turning and tool making, marine engineering and fabrication, accuracy and precision in manufacturing.

Teacher to see: Mr Scott

## **Engineering Technology Level 3 (13 EGT U)**

This course is for students who wish to complete further engineering skills and develop high level practical solutions by making a range of engineering projects using advanced machinery and processes. This is a unit standard based course where assessment is both through practical outcome and paperwork that shows evidence of accuracy, precision, engineering knowledge and understanding.

Prerequisites: Students should have studied and achieved in Level 2 Engineering.

Credits		Standards	Cost	\$60 material costs for take home projects (further costs could be added for large projects)	
Internal	External	Total	Unit Standards	Course endorsement	No
20	0	20		UE approved	No

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Teacher to see: Mr Perillo

# Furniture Production Technology Level 2 (12 FPT U)

At Level 2 students will continue to develop practical solutions in our wood workshops by learning a range of skills that are transferable between furniture making and carpentry. Ākonga will learn to use a range of tools and modern machinery as well as traditional woodworking methods to create practical outcomes. The project the ākonga will undertake will expand the students' skills and knowledge when working with different types of timber and will explore a variety of marking out, cutting and assembly skills. Unit Standards will be completed over the course of the year.

Prerequisites: Level 1 FPT or HOD discretion.

Credits	Standards	Cost	\$60 material costs for take home
			projects (further costs could apply

					for large projects)
Internal	External	Total	Unit Standards	Course endorsement	No
17	0	17		UE approved	Not applicable

Future possibilities: Any building and construction career, cabinet making, furniture making.

## Hospitality Level 2 (12 HOS U)

Teacher to see: Ms Pepper

This is a practical, hospitality industry course with standards in cookery and front of house service recognised by Service IQ / Te Pūkenga. Students are expected to work at a higher level with greater accuracy and commercial equipment is used to prepare café quality dishes. Ākonga have the opportunity to gain credits in the application of barista skills through the school Hot Shotz Café.

Prerequisites: Preference given to students who have completed food studies at Level 1.

Credits		Standards	Cost	None	
Internal	External	Total	Unit Standards	Course endorsement	No
19	0	19		UE approved	Not applicable

Future possibilities: Careers in the hospitality industry in businesses such as cafes, restaurants and bars in front-of-house. Further study to gain chef qualifications. Careers in tourism.

## Mixed Materials Technology Level 2 (12 MXT A)

Teacher to see: Mr Course

This course continues to expand on the product design process by developing skills and awareness in existing product research, sustainable design, and a variety of processing technologies. Using these skills, students create a materials and processing technology outcome using a range of mixed materials, including but not limited to wood, plastic, and metal. Akonga will use a combination of practical workshop skills and computer aided design to complete their projects.

Prerequisites: It would be an advantage for students to have studied MXT101, DVC101, TXT101. HOD discretion.

Credits		Standards	Cost	\$30 for materials used in take home projects	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
16	4	20		UE approved	Not applicable

Future possibilities: Product/industrial design, fashion design, jewellery and accessory design.

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## Mixed Materials Technology Level 3 (13 MXT A)

Teacher to see: Mr Course

This course follows the product design process. Students will be focusing on the key skills of this process including: awareness in existing product research, sustainable design, and a variety of processing technologies. Using these skills ākonga create a materials and processing technology outcome using a range of mixed materials, including but not limited to wood, plastic, and metal. Ākonga will use a combination of practical workshop skills and computer aided design to complete their projects and will have the opportunity to submit work for Scholarship in this course.

Prerequisites: It would be an advantage for students to have studied Level 2 MXT, DVC, TXT. HOD discretion.

Credits Standar	ds Cost	\$30 towards materials for take
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					home products
Internal	External	Total	Achievement Standards	Course endorsement	Yes
16	0	16		UE approved	Yes

Future possibilities: Any product or industrial design career or university course, interior designer, furniture design, textile design, fashion/jewellery/accessory design, computer aided design and manufacturing careers.

## **Textiles Technology Level 2 (12 TXT A)**

This course offers the opportunity for students to design, develop and construct a textile product that addresses an issue within the local community. Ākonga will gain practical sewing and textile construction skills by investigating traditional and contemporary materials and techniques to solve authentic problems sustainably.

Teacher to see: Ms Brown-Hawke

Teacher to see: Ms Brown-Hawke

Prerequisites: It would be an advantage for students to have studied TXT101. HOD discretion.

Credits		Standards	Cost	\$30 towards materials for take home products	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
16	0	16		UE approved	Yes

**Future possibilities:** Any product or industrial design career or university course, interior designer, furniture design, textile design, fashion/jewellery/accessory design, computer aided design and manufacturing careers.

## **Textiles Technology Level 3 (13 TXT A)**

This course offers the opportunity for students to design, develop and construct a textile product that addresses an issue or opportunity of their choice. Ākonga will gain advanced practical sewing and textile construction skills by investigating traditional and contemporary materials and techniques to solve authentic problems sustainably. Ākonga have the opportunity to submit work for Scholarship in this course.

Prerequisites: It would be an advantage for students to have studied TXT201. HOD discretion.

Credits		Standards	Cost	\$30 towards materials for take home products	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
16	0	16		UE approved	Yes

Future possibilities: Any product or industrial design career or university course, interior designer, furniture design, textile design, fashion/jewellery/accessory design, computer aided design and manufacturing careers.

# 34 VISUAL ARTS

Teacher to see: Miss Petrie

# Art Design Level 2 (12 ARD A)

Art Design is a computer based course where students learn the skill set needed to visually communicate ideas that inspire, inform or engage others. Based on real world outcomes students will be learning practical and digital skills while researching an individually chosen theme. Students will practice the elements of Art Design and illustration, as well as investigate the influence of contemporary artists, to generate a series of Design works to create a portfolio as a final submission. For the year students will have full access to an Adobe license, including Photoshop and Illustrator.

Prerequisites: 16 credits in Art101 or APD101 (portfolio) plus credits in at least one Internal Achievement Standard or by discretion of HOD. Must be confident on a computer.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
8	12	20		UE approved	Not applicable

**Future possibilities:** Graphic designer, architect, art director/curator, media designer, advertising, ux designer, illustrator, project management. Transferable skills: Written and oral communication. Analysis, logistical, organisational and collaborative skills. Image manipulation and file management. Creativity, experimentation and problem solving.

#### Art Design Level 3 (13 ARD A)

**Teacher to see:** Miss Petrie

Level 3 Art Design is a more independent digital based course where students get to develop and explore their own proposed theme. A variety of art making approaches and mediums are used to investigate creative ideas and establish resources. Students will be developing their practical knowledge and digital skills while using the influence of contemporary artists to generate a series of Design works for a final three panel portfolio submission. For the year students will have full access to an Adobe licence (including Photoshop) the art rooms, computer lab and photography studio.

Prerequisites: 16 credits in ARD201 (portfolio) plus credits in at least one Internal Achievement Standard or by discretion of HOD. Must be confident on a computer.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
8	14	22		UE approved	Yes

**Future possibilities:** Graphic designer, architect, art director/curator, media designer, advertising, ux designer, artist, illustrator, project management. Transferable skills: Written and oral communication. Analysis, logistical, organisational and collaborative skills. Image manipulation and file management. Creativity, experimentation and problem solving.

#### Art Painting Level 2 (12 ARP A)

Teacher to see: Mr Webby

A practical course which builds on experiences from Level 1 Art and is essential for Level 3 Painting. Students must enjoy drawing and painting as a way of recording information. They will explore practical and theoretical aspects of painting with reference to contemporary artists. Each student will work with the selected subject matter in a variety of media to develop an individual thematic and stylistic approach to art-making.

Prerequisites: 16 Art101 or APD101 Credits (portfolio) plus credits in at least one Internal Achievement Standard, or by discretion of HOD.

Credits		Standards	Cost	None	
Internal	External	Total	Achievement Standards	Course endorsement	Yes
8	12	20		UE approved	Not applicable

Future possibilities: Graphic designer, architect, art director/curator, media designer, advertising, storyboard artist. Transferable skills: Written and oral communication, analysis, logistical & collaborative skills.

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#### Art Painting Level 3 (13 ARP A)

Teacher to see: Mr Webby

An in-depth practical course in painting and drawing. This course focuses on research, development of ideas, and technical skills using wet media. Students must enjoy drawing and painting as a way of recording information. In this course, students will produce a body of work based on a theme that can be tailored to their individual interests. They will research a variety of contemporary artists and explore different media, conventions, and techniques in order to produce a 3-panel folio board.

Prerequisites: 16 ARP201 Credits (portfolio) plus credits in at least one Internal Achievement Standard, or by discretion of HOD.

Credits	Standards	Cost	None

Internal	External	Total	Achievement Standards	Course endorsement	Yes
8	14	22		UE approved	Yes

Future possibilities: Related careers: Graphic designer, architect, art director/curator, media designer, advertising, storyboard artist. Transferable skills: Written and oral communication, analysis, logistical & collaborative skills.

#### Art Photography Level 2 (12 APH A)

Introduction to photographic art, digital camera techniques, computer manipulation and printing processes. Students will develop skills in design, dynamic composition and aesthetics. Students will use photographic artists for inspiration to develop their own photographic work. Students will be introduced to Adobe Software for editing and manipulating their images. As with all Visual Art subjects, the course requires substantial commitment outside the classroom.

Teacher to see: Miss Craig

Prerequisites: 16 ART101 or APD101 Credits (portfolio) plus credits in at least one Internal Achievement Standard, or by discretion of HOD.

Credits			Standards	Cost	\$50 Camera Bond
Internal	External	Total	Achievement Standards	Course endorsement	Yes
8	12	20		UE approved	Not applicable

Future possibilities: Photographer: Fine art, commercial (fashion, wedding, sport, wildlife, events, journalism) web, app, graphic designer, digital illustrator, multimedia artist, online publisher, animation artist, game designer, architect. Transferable skills: Written and oral communication, analysis, logistical & collaborative skills, image manipulation and file management.

## Art Photography Level 3 (13 APH A)

Students are encouraged to develop their own personal style and approach to the art of photography. Students will increase their awareness of contemporary photographic practices, develop sensitivity towards subject matter and advance their technical and picture making skills.

Prerequisites: 16 Credits in Level 2 Art, or by discretion of HOD.

Credits			Standards	Cost	\$50 Camera Bond
Internal	External	Total	Achievement Standards	Course endorsement	Yes
8	14	22		UE approved	Yes

Future possibilities: Photographer, fine art, commercial (fashion, wedding, sport, wildlife, events, journalism) web, app, graphic designer, digital illustrator, multimedia artist, online publisher, animation artist, game designer, architect. Transferable skills: Written and oral communication, analysis, logistical & collaborative skills, image manipulation, file management.

# Art Sculpture Level 2 (12 ASC A)

An in-depth practical course in Sculpture. Each student's course is tailored to their individual interests and strengths. Contemporary artists are studied to complement and extend student performance. The focus is research, development of ideas and producing an individual body of work.

Prerequisites: 16 Credits in ART101 or APD101, or by discretion of HOD.

Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
8	12	20		UE approved	Not applicable

**Future possibilities:** Sculptor, fine art, commercial photographer (fashion, wedding, sport, wildlife, events, journalism) web, app, graphic designer, digital illustrator, multimedia artist, online publisher, animation artist, game designer, architect. Transferable skills: Written and oral communication, analysis, logistical & collaborative skills, image manipulation, file management.

#### Art Sculpture Level 3 (13 ASC A)

An in-depth practical course in Sculpture. Each student's course is tailored to their individual interests and strengths. Contemporary artists are studied to complement and extend student performance. The focus is research, development of ideas and producing an individual body of work.

Prerequisites: 16 Credits in Level 2 Art, or by discretion of HOD.

Credits	Standards	Cost	None

Internal	External	Total	Achievement Standards	Course endorsement	Yes
8	14	22		UE approved	Yes

**Future possibilities:** Sculptor, fine art, commercial photographer (fashion, wedding, sport, wildlife, events, journalism) web, app, graphic designer, digital illustrator, multimedia artist, online publisher, animation artist, game designer, architect. Transferable skills: Written and oral communication, analysis, logistical & collaborative skills, image manipulation, file management.

## Visual Art Level 3 (13 ART A)

This is a scaffolded Visual Arts Practical Level 3 full internal assessment course for students who do not meet the prerequisites of the other level 3 art courses. You will be working within the Sculpture and Photography disciplines. There is an option for the highly motivated to also be entered in the 14 credit external and scholarship but this will be on an individual basis. There is also a possibility of some English credits available on an individual basis. This course is designed for anyone to join who has an interest in art and being creative.

Teacher to see: Miss Craig

Teacher to see: Mrs Carter or Mr Hine

Teacher to see: Mrs Carter or Mr Howe

Prerequisites: None

Credits		Standards	Cost	none	
Internal	External	Total	Achievement Standards	Course endorsement	no
12	0	12		UE approved	No

Future possibilities: art director/curator, artist. Transferable skills: Written and oral communication. Analysis, logistical, organisational and collaborative skills. Image manipulation and file management. Creativity, experimentation and problem solving.

#### **VOCATIONAL PATHWAYS**

## Automotive Engineering Academy Level 2 (12 AUT U)

This course allows students to make a start on pre-trade training in Automotive Engineering. They spend one day a week at Unitec for Terms 1, 2 and 3. Also, students spend from 2:00 pm - 6:00 pm on a Tuesday here at school in the automotive workshop. Students complete Level 2 Automotive Industry Standards. These Standards and the experience gained will prepare students well for apprenticeships or for pre-apprenticeship training at tertiary level. Endorsement in Manufacturing and Technology Vocational Pathway.

Prerequisites: Engineering 103/203. This course is by application and interview only. Students must collect the application form from the Vocational Pathways Department.

Credits			Standards	Cost	None
Internal	External	Total	Unit Standards	Course endorsement	No
35+	0	35+		UE approved	No

Future possibilities: Automotive workshop engineering, automotive electrical and electronics, automotive fuel systems and exhaust systems, automotive preventive maintenance, automotive transmission systems, engineering.

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# **Building Academy Level 2/3 (12 CPA U)**

This Academy allows students to make a start on pre trade training in building and construction at both Level 2 and 3. Students go off site one day a week to Unitec to work in the building workshop on real life building projects.

Level 2 - In school two option lines timetabled - building class and Unitec one day a week. Students will complete Level 2 Building, Construction and Allied Trades Industry Standards (BCATS).

Level 3 - Students stay on site one day a week 2.00 pm – 6.00 pm on a Tuesday to work on real life projects. They also attend Unitec one day a week Term One and Two, working on practical projects. Term Three students are placed out on work placement for ten weeks one day a week. Students work with BCITO on Level 3 standards.

These Standards and the experience gained will prepare students well for apprenticeships or for pre-apprenticeship training at tertiary level. Endorsement in Manufacturing and Technology, Construction and Infrastructure Vocational Pathways.

#### Prerequisites: None.

Students must have attained or be working on achieving a minimum of 14 credits at L2 in English and maths. Physics/chemistry is also recommended. This course is by application and interview only. Students must collect an application form from the Vocational Pathways Department.

Credits			Standards	Cost	None
Internal	External	Total	Unit Standards	Course endorsement	No
Up to 74 credits over two years	0	Up to 74 over two years		UE approved	No

Future possibilities: Building, excavation, kitchen/bathroom design and build, carpentry, joinery, flooring, drafting, quantity surveying, engineering, installing heating, ventilation, air conditioning, plumbing, gas fitting, drain laying, roofing, tiling, glazing, painting, plastering, electrical. Transferable skills: Hands on skills acquired for work in the construction industry.

# Engineering Academy Level 2/3 (12 EGA U)

Teacher to see: Mrs Carter or Mr Scott

This Academy allows students to make a start on pre trade training in Engineering. Over a two year period working with Competenz / Te Pūkenga, students can complete all theory standards of a Year One apprenticeship. Students go off site one day a week to UNITEC to work in the Engineering workshop completing a welding and fabrication course.

Year 12 - In school two option lines - timetabled Engineering class and UNITEC one day a week.

Year 13 - One option line in timetable and on site Tuesday afternoons 2.00 pm to 6.00 pm working in the Engineering workshop on real life projects. Work placement one day a week in the Engineering sector.

Course Endorsement in Manufacturing and Technology Sector.

**Prerequisites:** Preferably Level 1 Engineering. At the discretion of the Engineering Director. Students must have attained or be working on achieving a minimum of 14 credits at L2 in English, math and physics. This course is by application and interview only. An application form to be collected from the Vocational Pathways Department.

Credits			Standards	Cost	A contribution to project costs - this is determined by the project selected.
Internal	External	Total	Unit Standards	Course endorsement	No
Up to 100 over two years	0	Up to 100 over two years		UE approved	No

Future possibilities: Trades in engineering - general engineering, fitting and machining, maintenance, tool-making, machining, heavy fabrication, light fabrication, heating, ventilation and air conditioning, refrigeration, electrical. Transferable skills: Hands on skills acquired for work in the engineering Industry - fabrication, welding, milling.

#### Gateway Level 2 (12 GAT U)

Teacher to see: Mrs Ngaeruaiti

Gateway is a work-based programme that combines work experience and industry training. In class, students explore their personal attributes and interests, research potential careers and learn competencies that increase work readiness such as creating a CV and job search skills. All students complete a work experience placement where they practise and develop self-management, time-management and communication in addition to job-specific skills.

Prerequisites: Students must apply and be interviewed with the Gateway Coordinator. Only students with NCEA Level 1 literacy and numeracy, with good attendance, will be considered for the Gateway programme.

Credits			Standards	Cost	None
Internal	External	Total	Unit Standards	Course endorsement	No
20+	0	20+		UE approved	No

Future possibilities: As Gateway is tailored to each individual student's strengths and personal career interests. This can open up many possibilities for future employment or training.

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### Gateway Level 3 (13 GAT U)

**Teacher to see:** Mrs Ngaeruaiti

Gateway is a work-based programme that combines work experience and industry training. In class, students explore their personal attributes and interests, research potential careers and develop competencies that increase work readiness such as face-to-face communication. In addition to the general classwork, students will engage in learning opportunities that are directly related to their future career pathway.

Prerequisites: Students must apply and be interviewed with the Gateway Coordinator. Only students with NCEA Level 1 literacy and numeracy, with good attendance and attitude, will be considered for the Gateway programme.

Credits			Standards	Cost	None
Internal	External	Total	Unit Standards	Course endorsement	No
10+	0	20+		UE approved	No

Future possibilities: As Gateway is tailored to each individual student's strengths and personal career interests. This can open up many possibilities for future employment or training.

## Health Academy Level 2/3 (23 HVA AU)

This is an Academy that allows students to make a start on a Health related career. Students go off site one day a week to Unitec to participate in courses related to Health. Students stay on site for in school timetabled Health class. Students will complete L2 and L3 units in Psychology and Human Behaviour, Health and Well-Being, Human Biology and other health industry related credits.

Teacher to see: Mrs Carter or Ms Tai Tin

Endorsement in Social and Community Services Vocational Pathway.

Prerequisites: Students must be in Health L2 or L3, or at the discretion of Mrs Carter.

This Academy is by application and an interview. Students must complete an application form from the Vocational Pathways Department.

Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards, Unit	Course endorsement	No
12 credits per semester	0	24	Standards	UE approved	No

Future possibilities: Health related careers – nursing, early childhood education, physiotherapy, mental health, social services. Transferable skills: Time management, customer service, personal presentation, team work, tertiary experience.

# Hospitality Academy Level 3 (13 HOS U)

This is an Academy that allows students to make a start on entry into the Hospitality Industry. Students go off site one day a week to work in a commercial tertiary kitchen. Students stay on site one day a week 2.00 pm – 6.00 pm on Tuesdays to work in the Hospitality room here at school. Students will complete Level 3 hospitality industry standards working towards their New Zealand Certificate in Cookery Level 3. Both Year 12 and 13 students are eligible for this Academy. Endorsement in Services Industries Vocational Pathway.

Teacher to see: Mrs Carter

**Prerequisites:** Hospitality 203 and Unit Standard 167 or at the discretion of Mrs Carter. This course is by application and interview only. Students must collect an application form from the Vocational Pathways Department.

Credits			Standards	Cost	None
Internal	External	Total	Unit Standards	Course endorsement	No
24 at Tertiary provider, up to 23 at school	0	Up to 47		UE approved	No

Future possibilities: Hospitality front of house, barista, chef, customer service. Transferable skills: Time management, customer service, personal presentation, team work.

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Teacher to see: Mrs Carter

# Mahi-a-Toi Academy Level 2/3 (12 VTO A)

This Academy operates at Rutherford College on a Wednesday 2.00 pm to 6.00 pm, allowing students to gain credits in Mahi-a-Toi at both Level 2 and 3. Students also attend tertiary one day a week for one semester - gaining experience and preparation for a higher level of tertiary study.

Students learn to analyse factors that influence the quality of individual performance in applied settings. Units based on Toi Māori which covers Ta Moko, Māori

Performing Arts, Whakairo, Korero and Kowhaiwhai are covered.

Students will complete credits towards NCEA Level 2 or 3 in Moteatea, Waiata-a-ringa, Visual Arts and Te Tauira Whakairo.

Endorsement in Creative Industries Vocational Pathway.

**Prerequisites:** Entry to the Mahi-a-Toi Academy is through an application and interview process. This course is by application and interview only. Students must see Mrs Carter for an application form.

Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards	Course endorsement	Yes
Up to 38	0	Up to 38		UE approved	Yes

Teacher to see: Mrs Carter

Future possibilities: Visual Arts at tertiary level.

#### Mechatronics Level 2/3 (12 MGT AU)

This is an Academy that operates through Rutherford College and a Tertiary Institution. A few places only are available in this specialist course. The program allows students to attain Level 2/3 standards while working on computer programming and electronics.

This course is held off-site and runs outside of normal school hours Wednesday 2.00 pm – 6.00 pm at Rutherford College and Term Three at a tertiary provider one day a week. Students will have one less subject in their school program to allow for this. They will be in a VCP class to support their out of school learning. Endorsement in Manufacturing and Technology Vocational Pathway.

Prerequisites: Science 101, DGT101 or Physics an advantage. This course is by application only. Students must see Mrs Carter for an application form.

Credits			Standards	Cost	None
Internal	External	Total	Achievement Standards, Unit	Course endorsement	No
22 each level	0	22 each level	Standards	UE approved	Not applicable

Future possibilities: Electronics, plastics, production engineer or technician, programmer, computer science, aircraft technician.

## Service Academy Level 2/3 (12 SVA U) (13 SVA U)

**Teacher to see:** Mrs Carter, Staff Morgan (L2), Ms Fugmann or Staff McGrath (L3)

This is an Academy that operates at Waitakere College. The course offers a pathway for possible progression towards the police, armed forces, security and other related services. It is for students who can benefit from direction, structure and personal discipline. The course involves military drill, physical training, leadership skills and outdoor training.

Year 12/Level 2 Academy are involved in at least three overnight training camps over the year, supported by the Youth Development Unit of the armed services. Year 13/Level 3 students have a training camp and take part in Tough Guy, Tough Girl.

Prerequisites: This course is by application and an interview. Students must see Staff Morgan, Ms Fugmann or Mrs Carter for an application form.

Credits			Standards	Cost	Students entering the Academy must commit to paying the up-front costs for PT gear and uniform. The cost is yet to be finalised but will be over \$250.00
Internal	External	Total	Unit Standards	Course endorsement	No
Varies according to level of participation	0	Varies		UE approved	No

**Future possibilities:** Army, air force, navy, police, customs, security. Transferable skills: Team work, self-discipline, fitness, time management, community service, personal presentation.