



RODNEY COLLEGE

Level 3 Subject Selection Booklet 2024



Vocational Pathways

What are the Vocational Pathways?

Vocational Pathways help students see how their learning is valued in the workplace by aligning assessment standards that can count towards NCEA with six industries. They help educators, families, whānau and employers work in partnership with young people to support them to build on their skills and talents and find work they have a passion for.



The Vocational Pathways divide the working world into six broad sectors which are linked to standards and qualifications. This enables students to map where they are now and where they would like to be.

The six Vocational Pathways are:

- Construction and Infrastructure
- Creative Industries
- Manufacturing and Technology
- Primary Industries
- Service Industries
- Social and Community Services

Benefits of using the Vocational Pathways

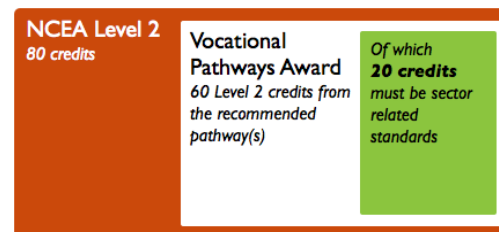
The Vocational Pathways enable young people to:

- Find out the standards, skills and competencies that are valued by employers in particular sectors
- Find out the job or career options that are available for each sector
- Identify current and future programmes of study that support their career pathways
- Undertake a relevant and cohort study programme that will enable them to achieve NCEA Levels 1, 2 and 3
- Demonstrate a vocational profile to tertiary providers and employers

Level 2 Vocational Pathways Award

The Award enables employers to assess more easily whether potential employees' skills align with their industry requirements. To get a Vocational Pathways Award, a minimum of 20 Level 2 credits must be from Sector-Related standard, with the remaining from Recommended standards to make up 60 pathway credits in total.

This diagram shows this relationship:



The Vocational Pathways Award(s) will show on a student's NZQA Record of Achievement. This is a real advantage when young people look for work and training opportunities in the sector.

Success in the Senior School

SOME KEY POINTS

1. YOU ARE RESPONSIBLE FOR YOUR LEARNING

We would encourage you to take control of your learning. Achievement will depend on how willing you are to accept the responsibility for your learning. We can provide support and guidance to help you acquire the skills to come with this responsibility - skills such as:

- Time management
- How to study effectively
- Personal organisation
- Research
- Essay writing etc.

If you require assistance please seek it - **that is your responsibility**. The people to see are:

- Your academic counsellor
- Your dean
- Your whanau teacher
- Your class teacher
- Careers adviser / guidance counsellor
- Any staff member whom you feel can help you
- The principal

2. BE ASSERTIVE - TAKE CONTROL

This is your education, **NOT** someone else's. You need to think about what you want to do and plan carefully - **then stick to your plan** if it is something you really want to do. Do not allow others to move you away from this without good reason. You should make decisions for yourself - selecting subjects to fit in with friends is not sensible planning. Ensure that teachers understand what you are aiming for and enlist their support.

3. HARD WORK IS NECESSARY

If you wish to achieve in the Senior School, and we know that you do, then you will have to work hard. You will need to attend classes regularly, maintain good work records, complete tasks, and have a system for regular reviews of work. Homework will be an important part of your week - make time for it and understand that homework means the following:

- Work set by your teacher which is to be done out of class time
- Completing work that you may have run out of time for in class
- Catching up on work you may have missed due to absence or other commitments
- Reviewing your notes and work covered in class
- Reading - material presented in class, additional material relating to a topic, etc.

Realise that homework is more than just work set by teachers. Much of it should be of your own making. You are in control - IT IS YOUR RESPONSIBILITY.

Introduction

This booklet has been produced to provide information to parents and students about subject options in the Senior School. We hope that it will assist you in making wise decisions about which subjects to take.

SUBJECT CHOICE

When deciding which subjects to take, there are a number of factors to consider.

These include:

1. For many careers you need to display general ability. One way of doing this is by getting the best possible grades you can by taking the subjects you enjoy and are good at.
2. There are many careers that require achievement, or further study, in specific subjects. You should carefully check the requirements for the career areas in which you are interested. People with the most relevant subjects for a particular type of career have the best chance of being accepted.
3. English, Mathematics and Science are compulsory at Level 1.
4. English is advisable at Level 2 and 3.
5. You need to look carefully as to where your subjects lead to in the Senior School, so you are not restricting your choice at Year 12 and Year 13.

Please note the following points:

- If there are insufficient student numbers for a subject to be viable, that subject will not run in 2024. When this occurs, the Dean will contact individual students and ask them to select another subject.
- Although every effort is made to accommodate each individual's choice of subjects, sometimes it is not possible. If you have a clash of subjects, your Dean will contact you to discuss this with you and ask you to select another subject. It is important that the Dean has accurate contact details for you for when school finishes for this year.
- If you are unable to pursue a particular subject due to clashes, lack of pre-requisites or any other reason, it is important to realise that there are alternate pathways available to you, both in school and at tertiary level. You may need to talk to the Careers Advisor, Mrs Wright.
- It is important to put in the time and effort to choose your subjects wisely now as class allocations are made according to your choices. Changes to subjects will not be accepted after the end of this year except in response to NCEA results and in exceptional circumstances. **It is too late to decide next year that you no longer wish to take a particular subject.**
- Students who do not return their option sheets by the due date may not be able to take their preferred course of study.

Qualifications

Certificate Endorsements

If you achieve 50 or more credits at 'Merit' or 'Excellence' at a particular level, you qualify for an endorsed certificate with Merit or Excellence.

NCEA Level 1

To gain a NCEA Level 1 Certificate a student must obtain 60 credits at Level 1. These may be in Achievement Standards or Unit Standards.

Additionally, students must meet the Literacy and Numeracy co-requisite requirements of:

- 10 Literacy credits via tagged standards in 2024 or sitting the Literacy - Reading and Writing - Common Assessment Activities (CAA)
- 10 Numeracy credits via tagged standards in 2024 or sitting the Numeracy Common Assessment Activity (CAA)

NCEA Level 2

To gain a NCEA Level 2 Certificate a student must obtain 60 credits at Level 2 or above. There are 10 Literacy credits required if students are going onto higher learning at a University or Polytechnic (5 reading and 5 writing).

NCEA Level 3

To gain a NCEA Level 3 Certificate a student must obtain 60 credits at Level 3. There are no Literacy or Numeracy requirements at Level 3. Approved students can also take Level 4 papers extramurally via a university of the school's choice and these papers are paid for by the school.

University Entrance

University Entrance (UE) is the minimum requirement to go to a New Zealand university. To be awarded UE a student needs:

- NCEA Level 3
- 14 credits at Level 3 in each of three approved subjects:
[Approved Subjects for UE](#)
- Literacy - 10 credits at Level 2 or above, made up of:
 - 5 credits in reading
 - 5 credits in writing
- Numeracy - 10 credits at Level 1 or above

Course Endorsements

Course endorsement provides recognition of student achievement in an individual course. Students will gain an endorsement for a course if, in a single school year, they achieve:

- 14 or more credits at Achieved, Merit or Excellence, and
- At least 3 of these credits from externally assessed standards.

NB: Physical Education and Level 3 Visual Arts do not need the external credits.

Academic Pathways

The framework below shows where subjects can lead to in Years 11, 12 and 13 to ensure all students have a pathway to success.

LEVEL 1	LEVEL 2	LEVEL 3	FUTURE
English	English Media Studies	English Literacy English Media Studies	U/P U/P U
Maori Spanish	Maori Spanish	Maori Spanish	U/P U
Mathematics	Mathematics Mathematics with Statistics	Mathematics with Calculus Mathematics with Statistics	U/P U/P
Science	Biology Chemistry General Science Physics	Biology Chemistry Physics	U/P U/P U/P
Geography History Commerce	Geography Tourism History Business Studies	Geography Tourism History Business Studies	U/P P U U/P
Physical Education Health	Physical Education Health	Physical Education Health	U/P U
Construction Materials Technology (Wood) Engineering Technology DVC Digital Technology or Computing Hospitality	Building Construction & Design Engineering Technology DVC Digital Technology Hospitality	Building Construction & Design Engineering Technology DVC Digital Technology Hospitality	A/P A/P U/P U/P P
Art Music Drama Performing Arts Technology	Art Photography Music Drama Performing Arts Technology	Art Photography Music Drama Performing Arts Technology	U/P U/P U/P U/P P

Future Key: A - Apprenticeships

U - University

P - Polytechnic

Level 3 Subject Information (Subject to Change)

Level 3 Biology

Total number of credits: 18 credits

University Entrance Approved Subject: Yes

Course description: Biology covers the structure and function of all living organisms, their relationships and evolutionary origins. In Term 1, students will study how humans maintain homeostasis with a focus on glucoregulation and thermoregulation. They will investigate how heart rate is affected by various drugs as they carry out a student-driven practical. In Term 2, students will look at how the evolutionary processes leading to speciation. In Term 3, students will explore the evolutionary processes that have resulted in the modern humans we are today. They can finish off the year by making informed judgements about the social, ethical and biological implications in an optional internal.

AS/US	Standard title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91601	Carry out a practical investigation in a biological context, with guidance	4	Y				Y						
AS91604	Demonstrate understanding of how an animal maintains a stable internal environment	3	Y		R	Y							
AS91605	Demonstrate understanding of evolutionary processes leading to speciation	4		Y	B	Y							
AS91606	Demonstrate understanding of trends in human evolution	4		Y	B	Y							
AS91602	Integrate biological knowledge to develop an informed response to a socio-scientific issue (optional)	3	Y		R								

Entry Requirements: Credits in at least one Level 2 Biology external or HOD approval

Supplementary materials/equipment fee: \$10 for recommended workbooks for externals

Level 3 Chemistry

Total number of credits: 15 credits

University Entrance Approved Subject: Yes

Course description: Chemistry is the central science and impacts on all facets of our lives. An understanding of chemistry is necessary to all other sciences, especially health and medical related sciences. All materials used by engineers and technologists are made by chemical reactions and we all experience chemical reactions continuously, whether it be breathing or baking a cake, driving a car or listening to a battery driven mp3 player. Chemistry is concerned with all aspects of molecules; their physical and chemical properties, their composition and structure, their synthesis and use in the 21st Century.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91393	Demonstrate understanding of oxidation-reduction	3	Y			Y							
AS91387	Carry out an investigation in chemistry, involving quantitative analysis	4	Y			Y							
AS91389	Demonstrate understanding of chemical processes in the world around us	3	Y		B	Y							
AS91390	Demonstrate understanding of thermochemical principles and the properties of particles around us	5		Y		Y							

Entry Requirements: Credits in at least one Level 2 Chemistry external or HOD approval

Supplementary materials/equipment fee: \$28 for Level 2 Chemistry SciPAD Bundle

Level 3 Building Construction and Materials Technology (wood) Total number of credits: 22 credits

University Entrance Approved Subject: No

Course description: This course will involve you in the designing and making of mainly wood based product solutions that satisfy either your own design brief or one provided for you. It is a strong advantage to have followed a technology or building construction course pathway if you intend pursuing an Industrial Apprenticeship, or a career in Industrial Technology / Design / Arts.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
US29677	Demonstrate knowledge of and apply safe working practices in a BCATS workplace	4	Y										
US29684	Undertake a Stage 3 BCATS project	12	Y										
US29682	Select use and maintain equipment, tools and machinery for a Stage 3 BCATS project	4	Y										
US29678	Demonstrate knowledge of, select and use materials for a Stage 3 BCATS project	4	Y										
US29681	Measure and calculate	3	Y										

Entry Requirements: Gained a minimum of 15 credits in a Level 2 technology course or by negotiation based on a willingness to learn

Supplementary materials/equipment fee: Approx. \$50 depending on materials chosen

Level 3 Business Studies

Total number of credits: 20 credits

University Entrance Approved Subject: Yes

Course description: Students of Commerce will: explore how different information and models can be used to communicate financial and non-financial decisions, apply problem-solving skills to situations in their local communities, and learn to think about problems from the perspective of other people and groups.

AS/US	Standard title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91382	Develop a marketing plan for a new or existing product	6	Y		R	Y							
AS91383	Analyse a human resource issue affecting businesses	3	Y		R								
AS91385	Investigate the exporting potential of a New Zealand business in a market, with consultation	3	Y		R	Y							
AS91381	Apply business knowledge to address a complex problem(s) in a given global business context	4		Y		Y							
AS91380	Demonstrate understanding of strategic response to external factors by a business that operates in a global context	4		Y	B	Y							

Entry Requirements: Level 2 Business Studies

Equipment: Chromebook or laptop is required

Level 3 Design and Visual Communication (DVC)**Total number of credits:** 16 credits**University Entrance Approved Subject:** Yes

Course description: DVC in Year 13 involves students resolving design problems and investigating solutions. Students will be encouraged to negotiate a design brief with real life clients and prepare and plan the presentation of their work using more formal and professional modes, whilst still producing creative and innovative design solutions. The course is self-directed so students will need to have strong skills in their chosen media, with strong self-discipline skills. The course carries through to university.

AS/US	Standard title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91629	Resolve a spatial design through graphics practice	6	Y					Orange	Red				Yellow
As91630	Resolve a product design through graphics practice	6	Y					Orange	Red				Yellow
AS91627	Initiate design ideas through exploration	4		Y				Orange	Red	Green	Blue		Yellow

Supplementary materials/equipment fee: \$10**Level 3 Digital Technology****Total number of credits:** Up to 17 credits**University Entrance Approved Subject:** Yes

Digital Technology focuses on students understanding accepted software engineering methodologies and user experience design processes and being able to apply these key concepts to design, develop, document and test complex computer programs.

Course description: The course will be delivered through project based learning which allows for team building and individual learning. This enables students to build a digital pathway that is unique to them and best fits their future career pathway. This is an approved course for university entrance and is recommended for students wanting to move into careers that focus on web development, programming or engineering. However, it is a good base for understanding what the mechanics are behind the internet. You can choose your project, electronics or web design. The compulsory standards will fit in with the project you choose.

AS/US	Standard title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91900	Conduct a critical enquiry to propose a digital technologies outcome (Compulsory)	6	Y					Orange	Red	Green	Blue	Purple	Yellow
AS91903	Use complex techniques to develop a digital media outcome (web design only)	4	Y					Orange	Red	Green		Purple	Yellow
AS91904	Use complex techniques to develop an electronics outcome (Option 1)	6	Y					Orange	Red				Yellow
AS91907	Use complex processes to develop a digital technologies outcome(Option 2)	6	Y					Orange	Red	Green	Blue	Purple	Yellow
AS91908	Present a reflective analysis of developing a digital outcome (Optional but recommended for endorsement)	3		Y				Orange	Red				Yellow

Supplementary materials/equipment fee: \$50 for take home materials

Level 3 Drama**Total number of credits:** Up to 22 credits**University Entrance Approved Subject:** Yes

Course description: This course is a progression from Level 2 Drama and designed for those interested in a career in the profession or simply because it is of interest. The course provides an opportunity to use and explore the elements, conventions, techniques and technologies in specific dramatic forms, both practically and in written analysis. They will rehearse and perform works in a range of dramatic forms, as well as respond to the work of others. An integral part of studying drama is the opportunity to watch and analyse professional theatre. Students will be expected to attend performances both in and out of class. For students with an interest in script-writing and directing, AS91519 and AS91520 may be offered at the discretion of the teacher. This is an excellent course to pair with Performing Arts Technology.

AS/US	Standard title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91512	Interpret scripted text to integrate drama techniques in performance	4	Y		R	Y							
AS91513	Devise and perform a drama to realise a concept	5	Y			Y							
AS91515	Select and use complex performance skills associated with a drama form or period	4	Y		R	Y							
AS91517	Perform a substantial role in a significant production	5	Y		R	Y							
AS91518	Demonstrate understanding of live drama performance	4		Y	W	Y							
AS91519	Script a drama suitable for live performance	5	Y		W	Y							
AS91520	Direct a drama performance	5	Y		R	Y							

Entry Requirements: At least 14 credits from Level 2 Drama or with HOD/TiC approval

Level 3 Engineering Technology (Metal)**Total number of credits:** 16 credits**University Approved Subject:** No

Course description: This course is designed to lead into apprenticeships and further education. This course focuses on deepening students' knowledge of machinery and equipment while offering them the opportunity to create and design their own engineering projects. Students will be introduced to computer assisted 3D design and 3D printing technology. Students work with a variety of materials and engineering techniques. The course covers a range of vocational pathways leading students into many possible careers in construction and manufacturing as well as university and tertiary courses.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91610	Develop a conceptual design considering fitness for purpose in the broadest sense	6	Y										
AS91620	Implement complex procedures	6	Y										
AS91622	Implement complex procedures to make a specified product using a Computer Numerical Controlled (CNC) machine	4	Y										

Entry Requirements: Level 2 Engineering Tech is an advantage or by consultation with the teacher

Supplementary materials/equipment fee: \$80

Level 3 English - Recommended course at Year 13**Total number of credits:** 18 credits**University Entrance Approved Subject:** Yes

Course description: This course builds on earlier learning by developing advanced language and communication skills, desirable for those who have university studies as their future goal. You will respond personally by interpretation, analysis and evaluation as you engage with a range of interesting texts. The emphasis is on critical literacy and on preparation for externals, aiming for Merit and Excellence grades. However, for some students that have a different pathway in mind, the focus will mainly be on a selection of internal achievement standards.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91472	Respond critically to specified aspects of studied written text(s), supported by evidence	4		Y	B	Y							
AS91473	Respond critically to specified aspects of studied visual or oral text(s), supported by evidence	4		Y	W	Y							
AS91475	Produce a selection of fluent and coherent writing, which develops, sustains, and structures ideas	6	Y		W	Y							
AS91478	Respond critically to significant connections across texts, supported by evidence	4	Y			Y							
AS91479	Develop an informed understanding of literature and/or language using critical texts	4	Y		R	Y							

Entry Requirements: A minimum of 14 credits in Level 2 English and the Level 2 Writing Portfolio standard

Equipment: Laptop or Chromebook

Scholarship: Students also have the opportunity to enter, and be prepared for, an additional written exam to achieve scholarship by demonstrating an exceptional level of sustained critical response, showing ability to synthesise knowledge, understanding and argument

Level 3 Literacy English**Total number of credits:** At least 12 credits**University Entrance Approved Subject:** No

Course description: This course focuses on helping students to improve their reading, writing, and language skills. Students will complete two Level 4 unit standards in the first semester, which will provide them with literacy requirements for University Entrance. In the second semester, students will complete other Level 3 and 4 unit standards, or there may be an opportunity for some students to complete Level 3 English achievement standards.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
US22750	Write a crafted text for a specified audience using researched material in English for an academic purpose	6	Y		W	Y							
US22751	Read and process information in English for academic purposes	6	Y		R	Y							

Equipment: Laptop or Chromebook

Level 3 Geography**Total number of credits:** 19 credits**University Entrance Approved Subject:** Yes

Course description: Geography is the study of both the natural and cultural environments and how they interact. A selection of 5 achievement standards will be taught individually. Two external standards will be taught, including 3.1 Natural Processes and 3.4 focusing on understanding and applying geographic concepts and skills. Other areas of study will be Contemporary Geographic Issues, Global Studies and undertaking research and fieldwork. These may vary depending on issues and field trips available.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91431	Analyse aspects of a contemporary geographic issue	3	Y		R	Y							
AS91430	Conduct geographic research with consultation	5	Y			Y							
AS91432	Analyse aspects of a geographic topic at a global scale	3	Y			Y							
AS91426	Demonstrate understanding of how interacting natural processes shape a New Zealand geographic environment	4		Y	B	Y							
AS91429	Demonstrate understanding of a given environment through selection and application of geographic concepts and skills.	4		Y	B	Y							

Entry Recommendations: Level 3 Geography is open to all students who can use a range of resources, interpret tasks accurately and write clearly. If you have taken Level 2 then you must have at least 14 Level 2 credits, 4 of these must be external.

Field Trips: Possible Tongariro - 4 days \$280

Level 3 Health**Total number of credits:** 20 credits**University Entrance Approved Subject:** Yes

Course description: Level 3 Health is research rich, with students expected to delve into current health issues both in New Zealand and overseas. Topics may include contemporary issues like vaping, cancer care, and mental health conditions; and ethical issues such as abortion, euthanasia and immunisation.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91461	Analyse a New Zealand health issue	5	Y			Y							
AS91462	Analyse an international health issue	5		Y		Y							
AS91463	Evaluate health practices currently used in New Zealand	5	Y			Y							
AS91464	Analyse a contemporary ethical issue in relation to well-being	4	Y			Y							

Level 3 History**Total number of credits:** 25 credits**University Entrance Approved Subject:** Yes

Course description: Level 3 History will be completed online as part of the Kotui Ako program, however the teacher is based at Rodney College and is available to work one on one with students. The course is a broad survey of NZ in the 19th Century, focussing on three main themes. They will communicate historical ideas and explore different perspectives on contested historical events. History is a valuable subject because it promotes an understanding of the world we live in today, as well as the past. It helps develop enquiring minds and organised analytical thinking. History reinforces skills for dealing with information, such as research and essay writing which is useful in tertiary study and in many careers.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91437	Analyse different perspectives of a contested event of significance to New Zealanders	5	Y		R	Y							
AS91435	Analyse an historical event or place that is of significance to New Zealanders	5	Y		R	Y							
AS91434	Research an historical event or place of significance to New Zealanders	5	Y		R	Y							
AS91436	Analyse evidence relating to an historical event of significance to New Zealanders.	4		Y	B	Y							
AS91439	Analyse a significant historical trend and the force(s) that influenced it (optional)	6		Y	B	Y							

Entry Requirements: At last 12 credits in Level 2 History or 14 credits in Level 2 English

Level 3 Hospitality**Total number of credits:** 18 credits**University Entrance Approved Subject:** Yes

Course description: This course supports students who wish to enter the Hospitality Industry. There are four components which will be assessed: open book work, closed book tests, verbal and practical tasks. **NB:** On average there will be **one practical lesson** and **three theory lessons** each week.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91643	Processing Technologies - Implement complex procedures to process a specified product	6	Y		Y								
AS91611	Generic Technology - Develop a prototype considering fitness for purpose in the broadest sense	6	Y		Y								
	Optional Gateway Courses	10											

Entry recommendations: Minimum 12 credits in Level 2 Hospitality. Must have passed US167 - Practise food safety methods

Equipment: Hair ties, covered shoes

Supplementary materials/equipment fee: \$100 for practical component and Service IQ individual training/assessment books, photographs for evidence

Level 3 Mathematics with Calculus**Total number of credits:** Up to 27 credits**University Entrance Approved Subject:** Yes

Course description: This course continues and extends the work of NCEA Level 2 Mathematics course. New topics are introduced while others are taken to a greater depth. The **calculus course** will include both external and internal Achievement Standards. The external standards will be assessed by national examination at the end of the year. This course is a prerequisite for entry into many degree programs at university, including engineering. Students wishing to apply for Engineering (Hons) at Auckland University will need to sit 3.5 Complex numbers (5 credits). A student may choose to do this standard instead of 3.2 and 3.15.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91574	Apply linear programming methods in solving problems	3	Y				Y						
AS91575	Apply trigonometric methods in solving problems	4	Y				Y						
AS91587	Apply systems of simultaneous equations in solving problems	3	Y				Y						
AS91578	Apply differentiation methods in solving problems	6		Y			Y						
AS91579	Apply integration methods in solving problems (optional)	6		Y			Y						
AS91577	Apply the algebra of complex numbers in solving problems (optional for university engineering pathways)	5		Y			Y						

Entry recommendations: Achieved Level 2 Algebra AS91261 and Calculus AS91262

Supplementary materials/equipment fee: \$35, graphics calculator approx. \$100

Level 3 Mathematics and Statistics**Total number of credits:** up to 22 credits**University Entrance Approved Subject:** Yes

Course description: This course continues and extends the study in NCEA Level 2 Statistics course. Some topics are a deepening of the Level 2 work; others are new topics. The intent is to enable students to become familiar with statistical techniques used at university and in the workplace. The external standards will be assessed by national examination at the end of the year.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91580	Investigate time series data	4	Y			Y	Y						
AS91581	Investigate bivariate measurement data	4	Y			Y	Y						
AS91587	Apply systems of simultaneous equations in solving problems	3	Y				Y						
AS91574	Apply linear programming methods in solving problems	3	Y				Y						
AS91584	Evaluate statistically based reports	4		Y	W	Y	Y						
AS91586	Apply probability distributions in solving problems (optional)	4		Y			Y						

Entry recommendations: Achieved Level 2 external Probability Methods AS91267

Supplementary materials/equipment fee: \$35, graphics calculator approx. \$100

Level 3 Media Studies**Total number of credits:** 17 credits**University Entrance Approved Subject:** Yes

Course description: Media Studies is about the active exploration, analysis, creation, and enjoyment of the media and its products. Media Studies examines the dynamic role of the media in society, how the media constructs messages about individuals, communities, and cultures, and how media products are produced, controlled, and distributed. The course develops critical thinking skills and students learn to analyse how media products are constructed to make media enjoyable, entertaining, persuasive, and powerful. Media products include television, magazines, newspapers, films, radio, podcasts, blogs, and on-line publications etc. Students will focus on a specific film genre and look at its relationship with society, as well as an aspect of the media in New Zealand. Another major aspect of the course is applying your knowledge of how a media text is constructed in order to produce your own short film or a magazine spread.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91492	Demonstrate understanding of the media representation of an aspect of New Zealand culture or society	3	Y			Y							
AS91493	Demonstrate understanding of a relationship between a media genre and society	4		Y	B	Y							
AS91494	Produce a design for a media product that meets the requirements of a brief	4	Y			Y							
AS91495	Produce a media product to meet the requirements of a brief	6	Y			Y							

Entry recommendations: At least 14 credits in Level 2 Media Studies and/or 14 credits in Level 2 English OR by HOD approval. Students need not have done Level 2 Media Studies but would be an advantage.

Equipment: Laptop or Chromebook

Level 3 Music**Total number of credits:** Minimum 14 credits**University Entrance Approved Subject:** Yes

Course description: This course will build on the experiences of Level 2 Music, as well as preparing students for study at a tertiary level. Students will further develop their knowledge of music's elements, conventions, processes, techniques and technologies. The course provides students with the opportunity to perform as both a featured soloist and as a member of a group; compose a variety of pieces of music, and study music works, identifying, describing and comparing the musical features and social context of the works. The development of aural skills is intrinsic to all music learning. Students must play an instrument and should be learning either through the Itinerant Music Scheme or privately. Students are expected to dedicate at least 2 hours a week practising their instrument. Students select their own programme from the offered standards in consultation with their teacher. **NB:** AS91425 is compulsory and all students are expected to enter in one external assessment.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91416	Perform two programmes of music as a featured soloist	8	Y										
AS91417	Perform a programme of music as a featured soloist on a second instrument	4	Y										
AS91418	Demonstrate ensemble skills by performing two substantial pieces of music as a member of a group	4	Y										
AS91423	Examine the influence of context on a substantial music work	4		Y	B	Y							
AS91425	Research a music topic	6	Y		R	Y							
AS91849	Compose three original songs that express imaginative thinking	8	Y										

Entry Requirements: Minimum 14 credits in NCEA Level 2 Music or HOD approval

Field Trips: Musical performance by APO or similar

Level 3 Performing Arts Technology**Total number of credits:** Minimum 18 credits**University Entrance Approved Subject:** No

Course description: This is a practical course designed to focus on the technical aspects of the performing arts and offers standards in Costume, Make-up, Prop, Set, Lighting and Sound Design as well as Stage Management. You will also have the opportunity for practical experience by involvement in the technological aspects of drama productions such as costume etc. This course can be taken with or without drama. The course also has cross curricular links to other subjects like art, photography, textiles and media, and music. During the course you will also have the opportunity for theatre trips to see plays.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
US28007	Select and apply a range of processes to enhance sound in a performance context	6	Y										
US28003	Research, develop and apply a stage lighting design concept for a given work	6	Y										
US28006	Research, develop and visually communicate a set design concept for a given work	6	Y										
US28002	Research, develop and visually communicate a costume design concept for a given work	6	Y										
US28004	Demonstrate and apply knowledge of make-up design for an entertainment and event context	6	Y										
US28005	Stage manage a production in an entertainment or event context	6	Y										

Entry Recommendations: Experience in design and/or construction welcome

Level 3 Photography**Total number of credits:** 16 credits**University Entrance Approved Subject:** Yes

Course description: This is a practical course of study with the emphasis on a high level of personal commitment and maturity. Students will work to develop their own art production skills by looking at the ways in which art is produced in New Zealand and around the world, both in a contemporary and an historical context. They will study photographers as models for their own work and will produce a portfolio for presentation and assessment.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91442	Analyse methods and ideas from established photography practice	4	Y										
AS91447	Use drawing to demonstrate understanding of conventions appropriate to photography	4	Y										
AS91457	Produce a systematic body of work that integrates conventions and regenerates ideas within photography practice	14		Y									

Entry Recommendations: Completed, and preferably passed, Level 2 Photography. Knowledge and use of Photoshop is required

Supplementary materials/equipment fee: Rental of an SLR Digital Camera \$20 per term, photographic paper and printing ink approx. \$20 per term

Level 3 Physics**Total number of credits:** 21 credits**University Entrance Approved Subject:** Yes

Course description: Science is the business of learning about how the whole universe works. The physics course aims to provide students with lifelong applicable knowledge of the physical processes that surround us. Whether students want to pursue a career in science or not, physics provides the basis for how everything works. Anything from wiring a speaker, understanding how waves travel, to finding the most efficient way to lift a box or build a car, there is something useful for everyone. Students will gain an understanding of mechanics (things that move), waves (light, sound etc.), and nuclear physics. We will be focusing on learning through practical investigations, inquiry driven learning and research based tasks. Students will take a holistic look at how the above fields of knowledge interact.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91521	Carry out a practical investigation to test a physics theory relating two variables in a non-linear relationship	4	Y			Y							
AS91525	Demonstrate understanding of Modern Physics	3	Y			Y							
AS91523	Demonstrate understanding of wave systems	4		Y		Y							
AS91524	Demonstrate understanding of mechanical systems	6		Y		Y							
AS91527	Use physics knowledge to develop an informed response to a socio-scientific issue	3	Y			Y							

Entry Recommendations: NCEA Level 2 credits in Physics external or HOD approval**Level 3 Physical Education****Total number of credits:** 16 credits**University Entrance Approved Subject:** Yes

Course description: This NCEA course has a combination of practical and written assessments and will continue the work covered in Levels 1 & 2 Physical Education. Students will complete one common standard totalling 4 credits. Students will then select a variety of Achievement and Unit standards based on their strengths, interests and areas of expertise.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91501	Demonstrate quality performance of a physical activity in an applied setting	4	Y				Y						
Optional Standards													
AS91498	Evaluate physical activity experiences to devise strategies for lifelong well-being	4	Y			Y	Y						
AS91502	Examine a current physical activity event, trend, or issue and its impact on New Zealand society	4	Y		R	Y							
AS91504	Analyse issues in safety management for outdoor activity to devise safety management strategies	3	Y		R	Y							
AS91505	Examine contemporary leadership principles applied in physical activity contexts	4	Y		R	Y							
US20673	Demonstrate knowledge of injury prevention and risk and injury management in sport or recreation	5	Y										

Equipment: Device, Activewear**Field Trips:** As applicable

Level 3 Tourism**Total number of credits:** Approx 16* credits**University Entrance Approved Subject:** No

Course description: Tourism is a two-year course (Years 12 and 13) which gives students the New Zealand Certificate in Tourism. The course introduces students to the skills and knowledge required by the travel and tourism industry as the basis for further industry related training. People who gain this qualification have demonstrated written and verbal communication skills, and mathematical and information technology skills in the context of the tourism and travel industry. The course covers both national and international travel destinations. Students learn about customer service, the stresses and tools needed to thrive in a tourism workplace, and conduct in-depth study into the Pacific and Australia. Each student works at their own pace and makes connections to their own experiences and interests as they look ahead to identify a tourism role for themselves.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
US3727	Demonstrate knowledge of Pacific Island countries as visitor destinations	5	Y										
US18211	Describe knowledge of Australia as a tourist destination	5	Y										
US378	Provide customer service for international visitors	3	Y										
US23755	Identify and self-evaluate the demands of a specific role in a tourism workplace	3	Y										

* There is potential to take additional standards as required eg an 8 credit Asian Destinations Standard, and two further standards each worth 4 credits if required *

Entry Recommendations: None, but an interest in travel or customer service related industries is an advantage

Field Trips: Approx \$20

Level 3 Visual Arts**Total number of credits:** Up to 22 credits**University Entrance Approved Subject:** Yes

Course description: This course will build on the experiences and skills from Level 2 Visual Art. Students will specialise in one discipline of either Sculpture, Design or Painting. They will also look at different ways in which art is produced by artists and designers in New Zealand and around the world both in a contemporary and an historical context. The portfolio is a prerequisite to gaining entry into Art & Design courses and Architecture school. Students will complete all 3 standards in their chosen discipline.

AS/US	Standard Title	Credits	Int	Ext	UE LIT	LIT L1	NUM	CI	MT	PI	SI	SC	CI
AS91440	Analyse methods and ideas from established design practice	4	Y		R	Y							
AS91441	Analyse methods and ideas from established painting practice	4	Y		R	Y							
AS91445	Use drawing to demonstrate understanding of conventions appropriate to design	4	Y										
AS91446	Use drawing to demonstrate understanding of conventions appropriate to painting	4	Y										
AS91455	Produce a systematic body of work that integrates conventions and regenerates ideas within design practice	14		Y									
AS91456	Produce a systematic body of work that integrates conventions and regenerates ideas within painting practice	14		Y									

Entry Recommendations: Students must have passed Level 2 Visual Arts

Supplementary materials/equipment fee: \$60 towards take home materials

Online Courses

It is possible for senior students to enrol in either Video Conferencing or Te Kura.

Video conferencing is where the student meets once a week online with an allocated teacher. This meeting will be when they have a normal timetabled class. The student must attend the online class. After that, the student will have three lessons (usually timetabled in the Library) to keep up to date with their online work. The following courses will be offered for Video Conferencing in 2024: <https://olc.school.nz/Courses>

Te Kura is where the student completes all their work online. There is a series of lessons which the students work through. The student will have three lessons (usually timetabled in the Library) to keep up to date with their online work. The current courses offered by Te Kura are:

<https://www.tekura.school.nz/subjects-and-courses/>

These may be subject to change in 2024.

Online courses are available to students who demonstrate a strong work ethic and enjoy working by themselves in an online environment. Students can choose different subjects to those that are offered at Rodney College. Students can also choose a course which they are not able to do at Rodney College due to a subject clash. Students can also choose which level they work at: NCEA Level 1, NCEA Level 2 or NCEA Level 3