



# Vocational Pathways

PRIMARY INDUSTRIES SECTOR



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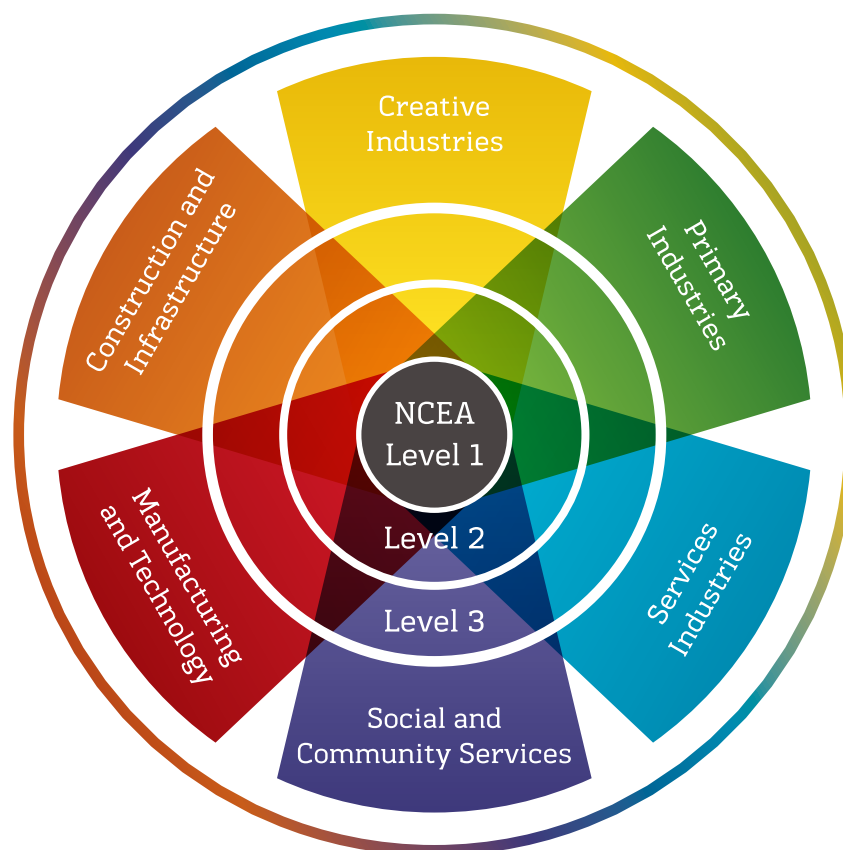
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New Zealand Government

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# Vocational Pathways



Vocational Pathways provide new ways to achieve NCEA Level 2 – the foundation for success in further education and the world of work.

The pathways help you see how your learning and achievement will be valued in the ‘real world’ when you look for a job and start your career.

Achieving Vocational Pathways means that you have developed skills, and achieved in areas that employers value, and that you have skills and knowledge that are relevant for their industries.

By achieving enough credits from the standards recommended by the sector, you can have primary industries recognised as your vocational pathway; this makes it easy for employers to see if you have the strengths and abilities they are looking for.

If you are aiming for a career in this sector, the pathway helps you to see which subjects and standards you should do to get to where you want to go.

And if you haven’t decided, but are thinking about the future, the pathways can help you see how your strengths and interests match up to an amazing range of jobs and study options out there.

You can use the Vocational Pathways to see where and how your learning relates to study options and employment opportunities. Visit [www.youthguarantee.net.nz](http://www.youthguarantee.net.nz) to find out more.

# What's the work like?

There's a huge range of jobs in this environmentally friendly sector, with a variety of experiences and opportunities on offer. You could work in the outdoors, in some of the most stunning landscapes in the world, planting, growing or tending animals, trees, crops. You may work alone, sometimes in isolated places, or with a bunch of like-minded people who'll quickly become friends for life. Your work changes with the seasons, sometimes it's light, sometimes physically and mentally demanding. There's also plenty of sophisticated high-tech toys to play with and plenty of on-the-job training to help you learn to use them.

If you're not working directly on the land you may be visiting as an adviser to part of the industry – like arboriculture, water or environmental management, the equine industry, or maybe an accountant, mechanic or vet.

Further from the farm, you could be in a processing plant, turning primary produce into value-added goods for sale and export. Here you'll be indoors, again working with high-tech equipment and possibly working flexible hours – great if you're not keen on a regular 40 hour week.

You might work far from the farm in a big city office, organising shipping, or developing government policy. If you're into science and technology, you're very welcome in this sector, whether you're analysing data or contributing to the next world-leading agricultural breakthrough. Safety is a very strong focus in all parts of the sector because there's always an element of danger.



“What I enjoy about my current situation is the independence I have and the ability to make decisions”

*Lucy, Herd Manager*

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## What qualities will I need?

In primary industries we're looking for people who like being with and looking after living things – you'll have a great headstart if you're interested in and respect the environment, like growing things, and believe in the ethical treatment of animals. If you like doing something physical, being with mates, enjoy being outdoors, there's a job on the land for you. In all primary industries you'll also be enthusiastic about technology – because there's plenty of it and because it's always changing, you'll need to keep up (there's always plenty of training to help you). This sector is also good for people who can use their initiative and be self-motivated, because you may be working on your own a lot and need to be able to make decisions quickly. In the primary industries there's lots of customer contact so you need to be good with people. Being good with detail also helps, as you may be working to exacting specifications. You could have a degree in anything from science to biology; polytech training in any one of dozens of industries, or enter the primary sector straight from school – there are jobs aplenty in this sector – and plenty of room to change and grow.

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## What's great about this sector?

There's a huge range and diversity of jobs from hands-on, to science or business roles and heaps of opportunities to learn new skills and move into different areas of each industry. There's always something new as technology and equipment constantly changes. You can earn good money, work outdoors or indoors, alone or with mates, play with some great technology. It's a big sector for Māori with a large proportion of New Zealand's forests, fisheries and dairy farms now Māori-owned and operated. No matter what part of the sector you choose to work in, you're contributing to an important and sustainable sector that's one of New Zealand's biggest employers and biggest exporters. If you care about the earth and the environment it's a good place to be. Whether you're from a rural background or a townie, there's something here for you.

## What key competencies do employers look for?

### *Thinking*

You'll be managing risk to yourself and others, looking for ways to be as productive as possible, using your knowledge in lots of different situations and observing what's happening around you.

### *Managing self*

You need to be able to work by yourself without supervision, be resilient, adaptable, reliable and trustworthy. You need to keep fit and healthy.

### *Participating and contributing*

You'll be an active, willing, and positive contributor in your community.

### *Using language, symbols and texts*

You'll need to be able to read, write and do maths for every day situations eg measuring, reading warning signs.

### *Relating to others*

Work in a team and recognise what your part is.

## Primary Industries sector:

any industry that provides or uses raw materials or plant and animal products for conversion into commodities and products for consumers. It includes agriculture, horticulture, dairy manufacture, forestry, mining, the seafood industry, landscaping, equine industries and animal care.

“I coordinate the work of 18 forestry production and thinning crews and usually spend two days in the bush and the other three in the office – so I get the best of both worlds.”

*Delila, Technical Services Coordinator*







“You’re in the outdoors most of the time, it’s a very good lifestyle.”

*Peter, general shepherd*

## Find out more

about life and jobs in this sector by browsing the:

- Careers NZ jobs database – look under the agriculture, horticulture, forestry, seafood and mining tab; and the animal care tab
- Industry training organisation websites including FITEC (forestry ITO, [www.fitec.org.nz](http://www.fitec.org.nz)); woodcareers ([www.woodcareers.org.nz](http://www.woodcareers.org.nz)); the Primary ITO ([www.primaryito.ac.nz](http://www.primaryito.ac.nz))
- Just the Job videos: all six series are available on DVD at your high school, you can search Just the Job on YouTube, or see the latest series on TVNZ On Demand.

# What work could I do?

Here is just a selection – see more on the websites listed on this page.

analysing hydrology data, scanning pregnant animals, caring for and rearing animals, fruit and vegetable production, seed technologist, landscaper, growing and selling flowers, maintaining parks and cemeteries, planting, looking after or measuring trees, sawmill kiln or treatment operator, yard supervisor, saw doctor, energy centre operator, paper maker or pulp mill operator machinist, warehouse person, operating and servicing machines and equipment, wood panels manufacturer, project or research engineer, operations or site manager, consultant/adviser, driving heavy vehicles, processing food or seafood, dairy farming, monitoring factory environments, supervising factory operations, managing a team, supply chain logistics, transport, export and storage, providing policy advice to government, research worker or scientist, supply chain analyst, aquaculture diver, marine farm worker, deckhand, vessel manager or marine engineer, seafood retailer, or wholesaler, turf laying and maintenance.

## What industries could I work in?

### *Growing and production:*

agriculture, horticulture, forestry, seafood, seed industry.

### *Processing:*

Meat, dairy, and food processing; solid wood processing, wood product manufacturing, pulp and paper, furniture making, seafood processing.

### *Primary industry servicing:*

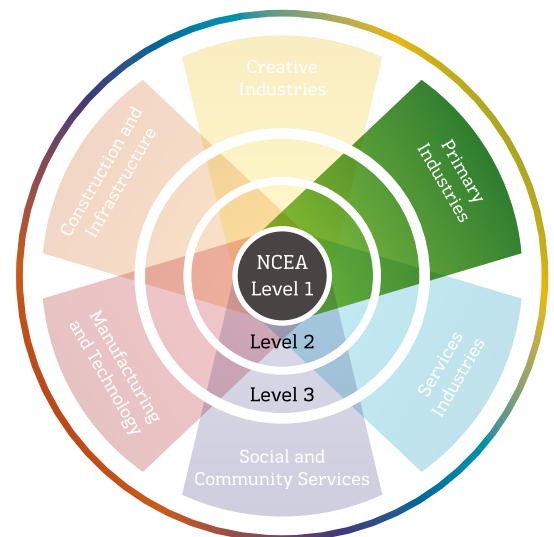
agent/advisory/consultancy, animal care, customer services, environmental services, equine (horses and racing) government, machinery and equipment, research and science, sports turf management supply chain and export, veterinary services.

# Vocational Pathways Award

If your NCEA Level 2 includes enough credits from recommended standards, and you meet the NCEA literacy and numeracy requirement, you can have Primary Industries awarded as your Vocational Pathway on your NZQA Record of Achievement. This will be a real advantage when you get out there and look for work and training opportunities in the sector.

- Achieve NCEA Level 2
- Meet the NCEA Literacy and Numeracy requirements (20 credits at Level 1 or above)
- Gain 60 Level 2 credits from recommended standards  
*including*
- at least 20 Level 2 credits from sector-related standards

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# Recommended Assessment Standards

## for the Primary Industries Pathway

The assessment standards on the following pages are recommended by the industries across our sector. So if you are looking for a pathway into the Primary Industries, you would do well to focus on these subjects and work hard to achieve the standards listed here.

You don't need to do all of these standards! However, if you gain enough credits from the standards we recommend then you are gaining the skills, knowledge and competencies that are most important to employers in our sector.

But there's another way to look at it: if these are the subjects you enjoy, and these are the sorts of standards that you tend to do well in, then you should definitely consider the Primary Industries as a possible future for you. As you will see in the next section, there are heaps of opportunities, and a wide range and growing number of jobs at many different levels.

## Level 1

These are the standards we recommend at level 1. If these are areas of strength or interest for you then you're making a great start at gaining the key skills you need in our sector.

Std No.	Title	Credits
<b>Accounting</b>		
90976	1.1 Demonstrate understanding of accounting concepts for small entities	3
90980	1.5 Interpret accounting information for sole proprietors	4
<b>Agricultural and Horticultural Science</b>		
90918	1.1 Carry out a practical agricultural or horticultural investigation	4
90157	1.2 Demonstrate practical skills used in agricultural or horticultural production	4
90919	1.3 Demonstrate knowledge of soil management practices	4
90920	1.4 Demonstrate knowledge of the geographic distribution of agricultural and horticultural primary production in New Zealand	3
90160	1.5 Demonstrate knowledge of the impact on the environment of primary production management practices	3
90921	1.6 Demonstrate knowledge of livestock management practices	5
90155	1.7 Demonstrate knowledge of pasture/crop management practices	4
90922	1.8 Design a landscape plan that reflects user requirements	3
90923	1.9 Demonstrate knowledge of basic plant propagation techniques	4
90924	1.10 Demonstrate knowledge of horticultural plant management practices and related plant physiology	5
<b>Biology</b>		
90925	1.1 Carry out a practical investigation in a biological context, with direction	4
90926	1.2 Report on a biological issue	3
90927	1.3 Demonstrate understanding of biological ideas relating to micro-organisms	4
90928	1.4 Demonstrate understanding of biological ideas relating to the life cycle of flowering plants	4



Std No.		Title	Credits
<b>Business Studies</b>			
90837	1.1	Demonstrate an understanding of internal features of a small business	4
90838	1.2	Demonstrate an understanding of external factors influencing a small business	4
90839	1.3	Apply business knowledge to an operational problem(s) in a given small business context	4
90840	1.4	Apply the marketing mix to a new or existing product	3
90841	1.5	Investigate aspects of human resource processes in a business	3
90842	1.6	Carry out and review a product-based business activity within a classroom context with direction	6
<b>Chemistry</b>			
90930	1.1	Carry out a practical chemistry investigation, with direction	4
90931	1.2	Demonstrate understanding of the chemistry in a technological application	2
90932	1.3	Demonstrate understanding of aspects of carbon chemistry	4
90933	1.4	Demonstrate understanding of aspects of selected elements	4
90934	1.5	Demonstrate understanding of aspects of chemical reactions	4
<b>Construction and Mechanical Technologies</b>			
91057	1.20	Implement basic procedures using resistant materials to make a specified product	6
91059	1.22	Demonstrate understanding of basic concepts used to make products from resistant materials	4
91061	1.24	Demonstrate understanding of basic concepts related to structures	3
91062	1.25	Demonstrate understanding of basic concepts related to machines	3
<b>Digital Technologies</b>			
91070	1.40	Demonstrate understanding of basic concepts of information management	3
91071	1.41	Implement basic procedures to produce a specified digital information outcome	4
91072	1.42	Demonstrate understanding of basic concepts of digital media	3
91073	1.43	Implement basic procedures to produce a specified digital media outcome	4
91074	1.44	Demonstrate understanding of basic concepts from computer science	3
91077	1.47	Demonstrate understanding of basic concepts used in the design and construction of electronic environments	3
91078	1.48	Implement basic interfacing procedures in a specified electronic environment	3
<b>Economics</b>			
90983	1.1	Demonstrate understanding of consumer choices, using scarcity and/or demand	4
90984	1.2	Demonstrate understanding of decisions a producer makes about production	5
90985	1.3	Demonstrate understanding of producer choices using supply	3
90986	1.4	Demonstrate understanding of how consumer, producer and/or government choices affect society, using market equilibrium	5
90987	1.5	Demonstrate understanding of a government choice where affected groups have different viewpoints	4
90988	1.6	Demonstrate understanding of the interdependence of sectors of the New Zealand economy	3

Std No.	Title		Credits
	<b>English</b>		
90849	1.1	Show understanding of specified aspect(s) of studied written text(s), using supporting evidence	4
90850	1.2	Show understanding of specified aspect(s) of studied visual or oral text(s), using supporting evidence	4
90851	1.3	Show understanding of significant aspects of unfamiliar written text(s) through close reading, using supporting evidence	4
90052	1.4	Produce creative writing	3
90053	1.5	Produce formal writing	3
90857	1.6	Construct and deliver an oral text	3
90855	1.7	Create a visual text	3
90852	1.8	Explain significant connection(s) across texts, using supporting evidence	4
90853	1.9	Use information literacy skills to form conclusion(s)	4
90854	1.10	Form personal responses to independently read texts, supported by evidence	4
90856	1.11	Show understanding of visual and/or oral text(s) through close viewing and/or listening, using supporting evidence	3
	<b>Generic Technology</b>		
91044	1.1	Undertake brief development to address a need or opportunity	4
91045	1.2	Use planning tools to guide the technological development of an outcome to address a brief	4
91046	1.3	Use design ideas to produce a conceptual design for an outcome to address a brief	6
91047	1.4	Undertake development to make a prototype to address a brief	6
91048	1.5	Demonstrate understanding of how technological modelling supports decision-making	4
91049	1.6	Demonstrate understanding of how materials enable technological products to function	4
91050	1.7	Demonstrate understanding of the role of subsystems in technological systems	4
91051	1.8	Demonstrate understanding of how different disciplines influence a technological development	4
91052	1.9	Demonstrate understanding of the ways a technological outcome, people, and social and physical environments interact	4
91053	1.10	Demonstrate understanding of design elements	3
91054	1.11	Demonstrate understanding of basic human factors in design	4
91055	1.12	Demonstrate understanding of basic concepts used in manufacturing	4
91056	1.13	Implement a multi-unit manufacturing process	4
	<b>Geography</b>		
91007	1.1	Demonstrate geographic understanding of environments that have been shaped by extreme natural event(s)	4
91009	1.3	Demonstrate geographic understanding of the sustainable use of an environment	3
91010	1.4	Apply concepts and basic geographic skills to demonstrate understanding of a given environment	4
91011	1.5	Conduct geographic research, with direction	4
91013	1.7	Describe aspects of a geographic topic at a global scale	3
91014	1.8	Apply spatial analysis, with direction, to solve a geographic problem	3
	<b>Health</b>		
90971	1.1	Take action to enhance an aspect of personal well-being	3
90972	1.2	Demonstrate understanding of influences on adolescent eating patterns to make health-enhancing recommendations	4
91097	1.3	Demonstrate understanding of ways in which well-being can change and strategies to support well-being	4
90973	1.4	Demonstrate understanding of interpersonal skills used to enhance relationships	5
90975	1.6	Demonstrate understanding of issues to make health-enhancing decisions in drug-related situations	4

Std No.	Title	Credits
<b>Home Economics</b>		
90956	1.1 Demonstrate knowledge of an individual's nutritional needs	5
90959	1.4 Demonstrate knowledge of practices and strategies to address food handling issues	5
90961	1.6 Demonstrate understanding of how packaging information influences an individual's food choices and well-being	4
<b>Mathematics and Statistics</b>		
91026	1.1 Apply numeric reasoning in solving problems	4
91027	1.2 Apply algebraic procedures in solving problems	4
91028	1.3 Investigate relationships between tables, equations and graphs	4
91029	1.4 Apply linear algebra in solving problems	3
91030	1.5 Apply measurement in solving problems	3
91031	1.6 Apply geometric reasoning in solving problems	4
91032	1.7 Apply right-angled triangles in solving measurement problems	3
91033	1.8 Apply knowledge of geometric representations in solving problems	3
91034	1.9 Apply transformation geometry in solving problems	2
91035	1.10 Investigate a given multivariate data set using the statistical enquiry cycle	4
91036	1.11 Investigate bivariate numerical data using the statistical enquiry cycle	3
91037	1.12 Demonstrate understanding of chance and data	4
91038	1.13 Investigate a situation involving elements of chance	3
<b>Media Studies</b>		
90991	1.3 Demonstrate understanding of the media coverage of a current issue or event	4
<b>Physical Education</b>		
90963	1.2 Demonstrate understanding of the function of the body as it relates to the performance of physical activity	5
<b>Physics</b>		
90936	1.2 Demonstrate understanding of the physics of an application	2
<b>Processing Technologies</b>		
91082	1.60 Implement basic procedures to process a specified product	4
91083	1.61 Demonstrate understanding of basic concepts used in processing	4
91084	1.62 Demonstrate understanding of basic concepts used in preservation and packaging techniques for product storage	4

Std No.	Title		Credits
	Science		
90940	1.1	Demonstrate understanding of aspects of mechanics	4
90941	1.2	Investigate implications of electricity and magnetism for everyday life	4
90942	1.3	Investigate implications of wave behaviour for everyday life	4
90943	1.4	Investigate implications of heat for everyday life	4
90944	1.5	Demonstrate understanding of aspects of acids and bases	4
90945	1.6	Investigate implications of the use of carbon compounds as fuels	4
90946	1.7	Investigate the implications of the properties of metals for their use in society	4
90947	1.8	Investigate selected chemical reactions	4
90948	1.9	Demonstrate understanding of biological ideas relating to genetic variation	4
90949	1.10	Investigate life processes and environmental factors that affect them	4
90950	1.11	Investigate biological ideas relating to interactions between humans and micro-organisms	4
90951	1.12	Investigate the biological impact of an event on a New Zealand ecosystem	4
90952	1.13	Demonstrate understanding of the formation of surface features in New Zealand	4
90953	1.14	Demonstrate understanding of carbon cycling	4
90954	1.15	Demonstrate understanding of the effects of astronomical cycles on planet Earth	4
90955	1.16	Investigate an astronomical or Earth science event	4
	Social Studies		
91039	1.1	Describe how cultures change	4
91040	1.2	Conduct a social inquiry	4
91041	1.3	Describe consequences of cultural change(s)	4
91043	1.5	Describe a social justice and human rights action	4
	Te Reo Māori		
91085	1.1	Whakarongo kia mōhio ki te reo o tōna ao	6
91086	1.2	Kōrero kia whakamahi i te reo o tōna ao	6
91087	1.3	Pānui kia mōhio ki te reo o tōna ao	6
91088	1.4	Tuhi i te reo o tōna ao	6
91089	1.5	Waihanga tuhinga i te reo o tōna ao	6
	Te Reo Rangatira		
90135	1.1	Whakarongo ki ngā kōrero o tōna ao	4
90801	1.2	Kōrero i te reo ōkawa	3
90137	1.3	Pānui i ngā tuhinga huhua noa	4
90803	1.4	Āta hanga i tētahi tuhinga	4
90805	1.5	Mātakitaki i te reo ataata	3
90802	1.7	Kōrero i te reo ōpaki	3
90804	1.8	Tuhituhi kōrero e hāngai ana ki te kaupapa	3

Std No.	Title	Credits
<b>Algebra</b>		
5223	Use formulae and equations to solve problems in the workplace	1
<b>Business Information Processing</b>		
101	Develop and use keyboarding skills to enter text	3
102	Consolidate keyboarding skills and produce accurate text based documents	3
<b>Generic Computing</b>		
18758	Find information using the Internet	2
18743	Produce a spreadsheet from instructions using supplied data	2
2780	Demonstrate and apply knowledge of a personal computer system	3
2792	Produce simple desktop published documents using templates	2
<b>Interpersonal Communications</b>		
1293	Be interviewed in an informal one-to-one, face-to-face interview	2
1285	Make inquiries and complete practical transactions	4
3501	Demonstrate knowledge of and apply listening techniques	3
3503	Participate and communicate in a team or group to complete a routine task	2
9707	Demonstrate knowledge of workplace communications requirements	5
<b>Number</b>		
26567	Use a strategy to estimate the solutions to number problems and make estimates of measurements in the workplace	2
<b>Personal Financial Management</b>		
24709	Produce a balanced budget for an individual	3
<b>Reading</b>		
2970	Independently read texts about life experiences which relate to a personal identified interest	3
25060	Independently read texts for practical purposes and to gain knowledge	6
<b>Self-Management</b>		
548	Demonstrate knowledge of management of alcohol and other drugs	2
12348	Demonstrate knowledge of anger and options for dealing with anger issues	2
8548	Demonstrate knowledge of accessing legal assistance	2
<b>Service Sector – Core Skills</b>		
64	Perform calculations for the workplace	2
56	Attend to customer enquiries face-to-face and on the telephone	2
<b>Social and Cooperative Skills</b>		
525	Recognise sexual harassment and describe ways of responding to it	2
542	Describe discrimination under the Human Rights Act 1993 and describe ways of responding to it	2
<b>Text and Information Management – Generic</b>		
12883	Enter and manage text for generic text and information management	4
<b>Trigonometry</b>		
5236	Use Pythagoras' theorem and trigonometry to solve problems related to right-angled triangles in the workplace	1

Std No.	Title	Credits
<b>Work and Study Skills</b>		
504	Produce a CV (curriculum vitae)	2
543	Work in a new workplace	3
1978	Identify and describe basic employment rights and responsibilities, and sources of information and assistance	3
10780	Complete a work experience placement	2
12382	Describe the significance of one's work within an employing organisation	2
4248	Describe requirements and expectations faced by employees within the workplace	3
4249	Demonstrate care and timeliness as an employee	4
<b>Writing</b>		
3483	Fill in a form	2
3490	Complete an incident report	2
1273	Express ideas in writing and write an original story	4
10792	Write formal personal correspondence	3
<b>Kōrero</b>		
7269	Whakawhitiwhiti kōrero māmā tētahi ki tētahi	4
<b>Māori Environmental Practice</b>		
6137	Describe tapu, noa, and mana in relation to the way Māori interact with the natural world	3
6138	Explain the role of whakatauki in relation to how Māori manage the environment	2
6139	Describe aroha in relation to the way Māori interact with the natural world	2
19670	Identify and describe the role of atua Māori in the natural world	2
19671	Identify and describe a Māori view of the natural world	4
<b>Pānui</b>		
7265	Pānui i ngā tuhinga kōrero māmā mō te tangata	4
<b>Tikanga Concepts</b>		
16165	Describe a hui and the roles associated with hui in accordance with tikanga	2
27106	Describe the terms connected with whakapapa and use terms within one's own whakapapa	2
27108	Describe the protocols and roles associated with powhiri in accordance with tikanga	2
16160	Describe the actions and characteristics of a selected atua in accordance with tikanga	3
<b>Tuhituhi</b>		
7257	Tuhituhi kōrero māmā tētahi ki tētahi atu	4
<b>Whakarongo</b>		
7261	Whakamāramatia ngā whakawhitiwhitinga kōrero māmā	4



Std No.	Title	Credits
<b>Agricultural Resource Maintenance</b>		
19037	Maintain and assist in laying agricultural/horticultural drains	2
<b>Agricultural Vehicles and Machinery</b>		
27602	Ride a quad bike on flat terrain in controlled conditions under close supervision	3
<b>Building, Construction, and Allied Trades Skills</b>		
24352	Demonstrate knowledge of and apply safe working practices in the construction of a BCATS project	2
24355	Demonstrate knowledge of construction and manufacturing materials used in BCATS projects	4
24356	Apply elementary workshop procedures and processes for BCATS projects	8
25919	Use hardware and fastenings for a BCATS project	2
25920	Use joints for a BCATS project	3
<b>Core Driving Knowledge and Skills</b>		
20969	Demonstrate procedures when a light motor vehicle has broken down	2
<b>Dairy Farming</b>		
18194	Prepare for milking, and milk cows, under close supervision	4
<b>Engineering – Materials</b>		
20917	Demonstrate basic knowledge of engineering materials	2
<b>Engineering – Measurement</b>		
4433	Select, use, and care for simple measuring devices used in engineering	2
<b>Equine Industry</b>		
1658	Demonstrate knowledge of the nature and requirements of a career in the equine industry	3
<b>General Agriculture</b>		
19136	Demonstrate the social requirements for daily living in the rural industry	2
19139	Gather and record information from a rain gauge, thermometer, and barometer; or weather station	1
19137	Describe the opportunities, advantages, and disadvantages of rural employment	2
<b>Introductory Primary Sector Knowledge</b>		
26969	Demonstrate knowledge of the New Zealand primary sectors	3
<b>Mechanical Engineering Technology</b>		
22923	Demonstrate basic engineering workshop skills under close supervision	12
22924	Develop a simple product using engineering materials	10
22926	Demonstrate knowledge of safety procedures in a specific engineering workshop	2
<b>Occupational Health and Safety Practice</b>		
497	Demonstrate knowledge of workplace health and safety requirements	3
<b>Production Horticulture</b>		
1	Prepare and sow outdoor seedbeds manually	5
23780	Undertake general garden maintenance	5
23782	Identify containers, materials, plants, and tools used in plant propagation	2
23783	Grow and maintain plants in containers from seed	5

# Level 2

Remember, if your NCEA Level 2 includes 60 credits from recommended standards, including at least 20 credits from sector-related standards, you can have Primary Industries recognised as your vocational pathway.

## Recommended Standards

Std No.		Title	Credits
<b>Biology</b>			
91153	2.1	Carry out a practical investigation in a biology context, with supervision	4
91154	2.2	Analyse the biological validity of information presented to the public	3
91155	2.3	Demonstrate understanding of adaptation of plants or animals to their way of life	3
91156	2.4	Demonstrate understanding of life processes at the cellular level	4
91157	2.5	Demonstrate understanding of genetic variation and change	4
91158	2.6	Investigate a pattern in an ecological community, with supervision	4
91159	2.7	Demonstrate understanding of gene expression	4
91160	2.8	Investigate biological material at the microscopic level	3
<b>Business Studies</b>			
90843	2.1	Demonstrate understanding of the internal operations of a large business	4
90844	2.2	Demonstrate understanding of how a large business responds to external factors	4
90845	2.3	Apply business knowledge to a critical problem(s) in a given large business context	4
90846	2.4	Conduct market research for a new or existing product	3
<b>Chemistry</b>			
91161	2.1	Carry out quantitative analysis	4
91162	2.2	Carry out procedures to identify ions present in solution	3
91163	2.3	Demonstrate understanding of the chemistry used in the development of a current technology	3
91164	2.4	Demonstrate understanding of bonding, structure, properties and energy changes	5
91165	2.5	Demonstrate understanding of the properties of selected organic compounds	4
91166	2.6	Demonstrate understanding of chemical reactivity	4
91167	2.7	Demonstrate understanding of oxidation-reduction	3
<b>Design and Visual Communication</b>			
91337	2.30	Use visual communication techniques to generate design ideas	3
91338	2.31	Produce working drawings to communicate technical details of a design	4
<b>Digital Technologies</b>			
91367	2.40	Demonstrate understanding of advanced concepts relating to managing shared information within information systems	3
<b>Economics</b>			
91223	2.2	Analyse international trade using economic concepts and models	4

Std No.		Title	Credits
<b>Education for Sustainability</b>			
90810	2.1	Plan, implement and evaluate a personal action that will contribute towards a sustainable future	6
90811	2.2	Describe the consequences of human activity within a biophysical environment in relation to a sustainable future	4
90812	2.3	Describe world views, their expression through practices and activities and the consequences for a sustainable future	4
90813	2.4	Describe values and associated behaviours in relation to a sustainable future	3
90814	2.5	Describe aspects of sustainability in relation to a sustainable future	4
90815	2.6	Work cooperatively to develop and present a strategy or design for sustainability in response to a future scenario	3
<b>English</b>			
91098	2.1	Analyse specified aspect(s) of studied written text(s), supported by evidence	4
91099	2.2	Analyse specified aspect(s) of studied visual or oral text(s), supported by evidence	4
91100	2.3	Analyse significant aspects of unfamiliar written text(s) through close reading, supported by evidence	4
91101	2.4	Produce a selection of crafted and controlled writing	6
91102	2.5	Construct and deliver a crafted and controlled oral text	3
91103	2.6	Create a crafted and controlled visual and verbal text	3
91104	2.7	Analyse significant connections across texts, supported by evidence	4
91105	2.8	Use information literacy skills to form developed conclusion(s)	4
91106	2.9	Form developed personal responses to independently read texts, supported by evidence	4
<b>Generic Technology</b>			
91354	2.1	Undertake brief development to address an issue	4
91355	2.2	Select and use planning tools to manage the development of an outcome	4
91356	2.3	Develop a conceptual design for an outcome	6
91357	2.4	Undertake effective development to make and trial a prototype	6
91359	2.6	Demonstrate understanding of the role of material evaluation in product development	4
91364	2.11	Demonstrate understanding of advanced concepts related to human factors in design	4
91365	2.12	Demonstrate understanding of advanced concepts used in manufacturing	4
91366	2.13	Undertake development and implementation of an effective manufacturing process	6
<b>Geography</b>			
91240	2.1	Demonstrate geographic understanding of a large natural environment	4
91243	2.4	Apply geography concepts and skills to demonstrate understanding of a given environment	4
91246	2.7	Explain aspects of a geographic topic at a global scale	3
91247	2.8	Apply spatial analysis, with guidance, to solve a geographic problem	3
<b>Health</b>			
91235	2.1	Analyse an adolescent health issue	5
91236	2.2	Evaluate factors that influence people's ability to manage change	5
91238	2.4	Analyse an interpersonal issue(s) that places personal safety at risk	4
91239	2.5	Analyse issues related to sexuality and gender to develop strategies for addressing the issues	5

Std No.		Title	Credits
<b>Home Economics</b>			
91302	2.4	Evaluate sustainable food related practices	5
<b>Mathematics and Statistics</b>			
91257	2.2	Apply graphical methods in solving problems	4
91258	2.3	Apply sequences and series in solving problems	2
91260	2.5	Apply network methods in solving problems	2
91261	2.6	Apply algebraic methods in solving problems	4
91262	2.7	Apply calculus methods in solving problems	5
91263	2.8	Design a questionnaire	3
91264	2.9	Use statistical methods to make an inference	4
91265	2.10	Conduct an experiment to investigate a situation using statistical methods	3
91266	2.11	Evaluate a statistically based report	2
91267	2.12	Apply probability methods in solving problems	4
91268	2.13	Investigate a situation involving elements of chance using a simulation	2
<b>Physics</b>			
91169	2.2	Demonstrate understanding of physics relevant to a selected context	3
91170	2.3	Demonstrate understanding of waves	4
91171	2.4	Demonstrate understanding of mechanics	6
91173	2.6	Demonstrate understanding of electricity and electromagnetism	6
<b>Processing Technologies</b>			
91351	2.60	Implement advanced procedures to process a specified product	4
91352	2.61	Demonstrate understanding of advanced concepts used in processing	4
91353	2.62	Demonstrate understanding of advanced concepts used in preservation and packaging for product storage	4
<b>Social Studies</b>			
91279	2.1	Demonstrate understanding of conflict(s) arising from different cultural beliefs and ideas	4
91281	2.3	Describe how cultural conflict(s) can be addressed	4
<b>Te Reo Māori</b>			
91284	2.1	Whakarongo kia mōhio ki te reo o te ao torotoro	4
91285	2.2	Kōrero kia whakamahi i te reo o te ao torotoro	6
91286	2.3	Pānui kia mōhio ki te reo o te ao torotoro	6
91287	2.4	Tuhi i te reo o te ao torotoro	6
91288	2.5	Waihanga tuhinga auaha, i te reo o te ao torotoro	6
<b>Te Reo Rangatira</b>			
90442	2.1	Whakarongo ki te reo whaikupu	3
90750	2.2	Rangahau, whakarite me te whakaputa whaikōrero	3
90752	2.3	Pānui i te reo tawhito	3
90754	2.4	Whakaputa i te tuhinga	4
90751	2.7	Whakaputa i te kōrero tene	2
90753	2.8	Pānui i te reo hōu	3
90755	2.9	Titotito i te kōrero whakangahau	3
90756	2.10	Mātakitaki me te hanga i te whakaaturanga	3

Std No.	Title	Credits
<b>Business Information Processing</b>		
103	Use data entry skills to input data	3
<b>Business Studies</b>		
22854	Apply innovative thinking techniques within a business context	2
<b>First Aid</b>		
26551	Provide first aid for life threatening conditions	1
26552	Demonstrate knowledge of common first aid conditions and how to respond to them	1
<b>Generic Computing</b>		
2784	Create and use a computer spreadsheet to solve a problem	3
2791	Integrate spreadsheet and database data into word processed documents to meet a set brief	3
<b>Interpersonal Communications</b>		
1277	Communicate information in a specified workplace	3
9677	Participate in a team or group which has an objective	3
1294	Be interviewed in a formal interview	2
1299	Be assertive in a range of specified situations	4
<b>Personal Financial Management</b>		
24695	Demonstrate knowledge of income, taxation, and other deductions for personal financial management	3
24699	Make an informed decision relating to personal income and evaluate its consequences	2
<b>Reading</b>		
2989	Select, assess, and read texts to gain knowledge	3
25073	Read texts to recognise differing points of view on a topic	3
<b>Self-Management</b>		
12349	Demonstrate knowledge of time management	3
7123	Apply a problem solving method to a problem	2
12355	Describe stress and ways of dealing with it	2
4258	Describe ways of managing and coping with change	2
<b>Service Sector – Core Skills</b>		
57	Provide customer service	2
62	Maintain personal presentation and a positive attitude in a workplace involving customer contact	3
<b>Work and Study Skills</b>		
377	Demonstrate knowledge of diversity in the workplace	2
24871	Complete forms in a work-related context	2
4252	Produce a targeted resume	2
4253	Demonstrate knowledge of job search skills	3
7121	Demonstrate skills to search, access, and select information	2
10781	Produce a plan for own future directions	3
12383	Explore career options and their implications	3

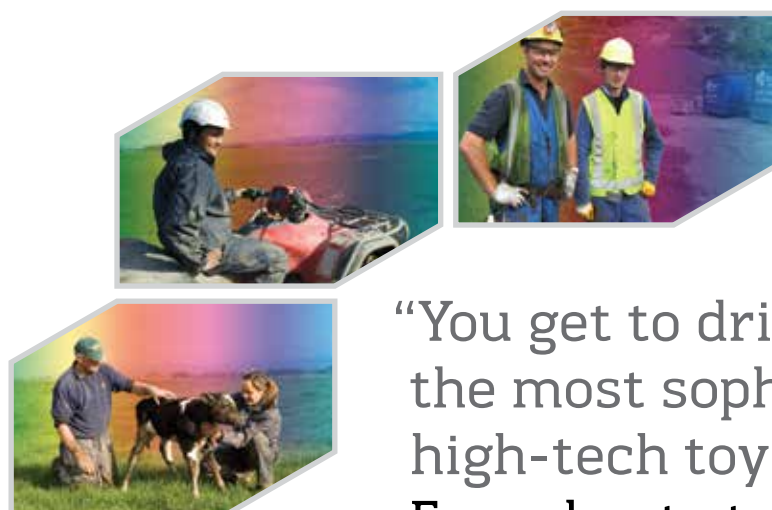
Std No.	Title	Credits
<b>Workplace Relations</b>		
22144	Demonstrate knowledge of the role of a union representative with regard to employee diversity in a workplace	3
<b>Writing</b>		
3492	Write a short report	3
1280	Use graphics in communication	2
<b>Kaupapa Tangaroa</b>		
17475	Demonstrate knowledge of Māori customary linkages with fish and fish utilisation	3
17477	Examine Māori customary methods to trap and preserve indigenous freshwater species	2
17480	Preserve shellfish and seaweed using Māori customary practices and demonstrate associated knowledge	2
<b>Korero</b>		
7270	Korero mona ake me ana mahi	7
<b>Māori Environmental Practice</b>		
6142	Explain kaitiakitanga in relation to the way Māori interact with the natural environment	3
6143	Carry out a local kaitiakitanga activity with direction	6
<b>Māori Management – Generic</b>		
23091	Communicate in the workplace using basic te reo Māori and waiata	6
<b>Māori Office Systems</b>		
2893	Provide Māori culturally sensitive reception services	2
<b>Tikanga Hauora</b>		
18355	Explain anger management in an oranga context	4
<b>Panui</b>		
7266	Panui i nga tuhinga korero mo tetahi atu	6
<b>Te Whakamahi Whenua</b>		
25469	Describe crop propagation in accordance with local tikanga	4
25471	Describe the cultivation of crops in accordance with local tikanga	4
25474	Describe the harvesting of crops in accordance with local tikanga	4
25476	Describe crop storage practices in accordance with local tikanga	4
<b>Tikanga Concepts</b>		
27126	Describe, and explain the purpose of, purakau within Te Ao Māori	2
27129	Describe and explain the use of karakia in accordance with tikanga	2
27122	Describe a migration from Hawaiki and a landing in Aotearoa in accordance with tikanga	2
<b>Tikanga Practices</b>		
27126	Describe, and explain the purpose of, purakau within Te Ao Māori	2
<b>Tuhituhi</b>		
7258	Tuhituhi korero mona ake me ana mahi	6
<b>Whakarongo</b>		
7262	Whakamaramatia nga korero me nga mahi a tetahi atu	7
<b>Automotive Preventive Maintenance</b>		
229	Identify the general locations and functions of motor vehicle systems and main components	4
247	Prepare a vehicle and/or machine for use and shutdown after use	2
21690	Perform general servicing checks on a motor vehicle	3
21682	Demonstrate knowledge of an oxy-acetylene welding plant in the motor industry	2
21685	Use an oxy-acetylene welding plant in the motor industry	3



Std No.	Title	Credits
<b>Building, Construction, and Allied Trades Skills</b>		
24350	Identify, select, maintain, and use portable power tools for BCATS projects	6
24360	Demonstrate knowledge of timber and other construction materials used in BCATS projects	5
12927	Identify, select, maintain, and use hand tools for BCATS projects	6
12933	Complete minor concrete works as a BCATS project	4
<b>Civil Defence Emergency Management Response</b>		
528	Demonstrate survival techniques for a Civil Defence emergency	3
<b>Core Driving Knowledge and Skills</b>		
3462	Demonstrate knowledge of traffic law for the purpose of safe driving	3
3465	Describe driving hazards and risk reduction strategies and responses to driving hazards	3
3467	Describe dynamics, and techniques for managing dynamics, of light motor vehicles	4
1734	Demonstrate knowledge of stress, health and fatigue for driving	3
<b>Engineering Core Skills</b>		
2395	Select, use, and care for, engineering hand tools	4
2396	Select, use and maintain portable hand held engineering power tools	4
<b>Environmental Education</b>		
18663	Demonstrate knowledge of and apply sustainable environmental management practices in the workplace	4
<b>Occupational Health and Safety Practice</b>		
17593	Apply safe work practices in the workplace	4
25046	Describe hazard identification and control, and apply risk assessment procedures under supervision in the workplace	2
17459	Demonstrate and apply knowledge of safe manual handling practices in the workplace	3
19522	Undertake job safety analysis	4
<b>Pre-Hospital Emergency Care</b>		
25411	Demonstrate knowledge of and use an Automated External Defibrillator (AED)	1
<b>Welding</b>		
21907	Demonstrate and apply knowledge of safe welding procedures under supervision	3
<b>Work and Study Skills</b>		
16688	Identify and manage the effects of shift work	2
<b>Workplace Fire and Emergency Response</b>		
3271	Suppress fire with hand extinguishers and fixed hose reels	1
16797	Identify, prepare for, and take action in a workplace emergency	3

# Sector Related Standards

Std No.	Title		Credits
<b>Agricultural and Horticultural Science</b>			
91289	2.1	Carry out an extended practical agricultural or horticultural investigation	4
91290	2.2	Demonstrate understanding of techniques used to modify physical factors of the environment for New Zealand plant production	4
91291	2.3	Demonstrate understanding of advanced plant propagation techniques used for commercial production in New Zealand	4
91292	2.4	Demonstrate understanding of how management practices influence plant growth and development in New Zealand commercial production	4
91293	2.5	Demonstrate understanding of livestock reproductive techniques in commercial production in New Zealand	4
91294	2.6	Demonstrate understanding of how New Zealand commercial management practices influence livestock growth and development	4
91295	2.7	Demonstrate understanding of interactions between livestock behaviour and New Zealand commercial management practices	4
91296	2.8	Produce a landscape plan	4
91297	2.9	Demonstrate understanding of land use for primary production in New Zealand	4
91298	2.10	Report on the environmental impact of the production of a locally produced primary product	4

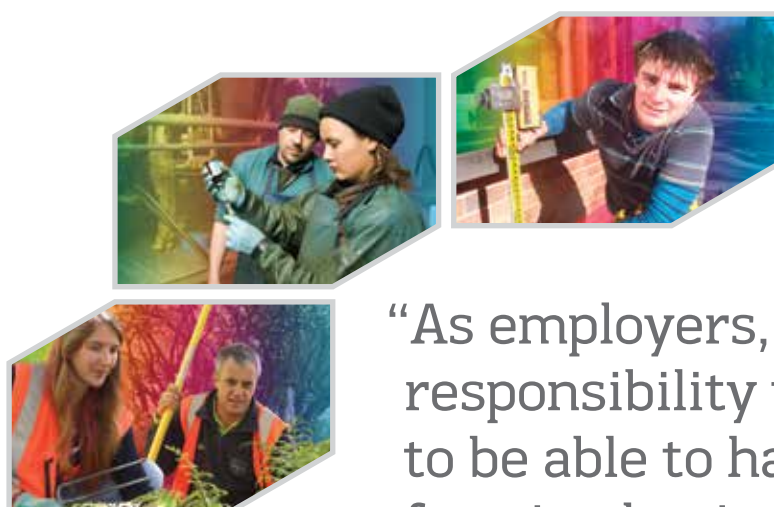


“You get to drive some of the most sophisticated high-tech toys out there. From boats to tractors to diggers to chainsaws to precision agriculture.”

Std No.	Title	Credits
<b>Agricultural Resource Maintenance</b>		
31	Connect up, and perform repairs and maintenance on an on-farm water supply system	2
<b>Agricultural Vehicles and Machinery</b>		
24552	Check and drive a basic wheel tractor with an attached implement on flat terrain	5
19044	Demonstrate knowledge of the legal requirements and hazards associated with tractor use	3
19047	Demonstrate knowledge of the working principles, maintenance, and servicing of petrol and diesel engines	2
19053	Ride a motorcycle on flat terrain	3
24552	Check and drive a basic wheel tractor with an attached implement on flat terrain	5
24553	Drive a light utility vehicle (LUV) on flat terrain	4
24554	Ride a quad bike on flat terrain in the workplace	4
24555	Demonstrate knowledge of the safe operation of a motorcycle	3
24556	Demonstrate knowledge of the safe operation of a light utility vehicle (LUV)	3
24557	Demonstrate knowledge of the safe operation of a quad bike	3
<b>Amenity Horticulture</b>		
21027	Plant and care for bedding plants, bulbs or herbaceous perennials	10
21028	Plant and care for trees, shrubs, and climbing plants	10
<b>Animal Care</b>		
5152	Monitor health and provide husbandry for horses	6
5180	Demonstrate knowledge of the anatomy and physiology of animals	10
7337	Monitor health and provide husbandry for dogs	5
<b>Apiculture</b>		
19883	Demonstrate knowledge of beehive, and beehive frame assembly and repair	2
19886	Demonstrate knowledge of disease in the bee colony	3
19888	Demonstrate knowledge of the New Zealand beekeeping industry, and career and training opportunities	2
19893	Describe physical characteristics of bees and their behaviour	3
<b>Aquaculture</b>		
23856	Describe fouling organisms and their control for an aquaculture operation	5
16337	Outline New Zealand Greenshell mussel (kutai, kuku) farming	10
16672	Outline the Pacific oyster (tio) farming industry in New Zealand	10
17254	Outline the abalone (paua) farming industry in New Zealand	10
19852	Outline the salmon farming industry in New Zealand and worldwide	10
<b>Arboriculture</b>		
2765	Plant trees and shrubs	4
<b>Cattle Farming</b>		
19074	Prepare for calving and calve a cow as directed	5
26417	Assist with handling cattle in yards	2
24623	Demonstrate knowledge of breeds and classes of cattle, and identification and records for cattle	2
<b>Dairy – Generic</b>		
19967	Apply mathematical concepts in the dairy industry	4

Std No.	Title	Credits
<b>Dairy Farming</b>		
18191	Demonstrate knowledge of safe handling and health problems of dairy cattle, associated with milking	3
18192	Demonstrate knowledge of how cows produce milk	2
24548	Assist with milking	8
18193	Demonstrate knowledge of farm dairy design, and the effluent system	2
19093	Demonstrate knowledge of deer welfare and stockmanship	5
<b>Equine Care</b>		
1623	Prepare a horse for show	3
1650	Prepare a horse for travel by road, and load and unload	4
1656	Groom a horse	2
6623	Demonstrate horse clipping technique	2
14590	Demonstrate knowledge of preparing and attending to horses when transported by air	2
19459	Demonstrate knowledge of the operation of, and erect temporary electric fences in an equine environment	2
19460	Maintain and repair equine fencing	4
1636	Receive and despatch horses	2
1648	Clean stables	2
<b>Equine Health</b>		
14594	Demonstrate knowledge of horse anatomy, and identify signs of good health and ill health in horses	3
19949	Identify basic components and functions, and common problems of horses' body systems	3
<b>Equine Training</b>		
19945	Lunge a horse for exercise	4
1660	Identify, catch, and prepare a horse for exercise	4
<b>Equitation</b>		
1618	Ride a horse for exercise	2
1619	Ride a horse in a balanced position at different gaits on the flat and over 50 to 60 cm fences	4
<b>Farming Skills</b>		
19081	Describe annual feed supply and demand, methods to manage feed surpluses and deficits, and perform calculations	2
15	Describe the end use of crops and factors which affect crop yields, and interpret seed quality	2
19106	Assist with handling livestock when moving and drafting, and when livestock are distressed	4
24629	Feed livestock with supplementary feed as directed	2
24630	Assist with livestock grazing management, and feed livestock under direct supervision	4
24635	Demonstrate knowledge of, and assist with, livestock scanning	2
19112	Check and report on livestock	4
19114	Assist with handling and treatment of livestock	6
19116	Demonstrate knowledge of livestock behaviour and animal welfare	2
24636	Demonstrate knowledge of plants in the agriculture industry	3

Std No.	Title	Credits
<b>Fencing</b>		
561	Install, dismantle, and store temporary electric fences	2
24822	Install wooden battens for fencing	4
24832	Open and draw out a coil of wire, tie knots, join wire, and prepare wire for transport and storage	5
24833	Identify and maintain fencing tools and equipment, and identify fencing construction materials and wire types	3
24834	Replace a broken post, and repair a broken wire in fences	5
24835	Identify the location of a fault in electric fences, and replace electric fence components	3
24836	Describe non-electric fences, fence support materials, and safe practices in fencing	2
<b>Floriculture</b>		
20699	Demonstrate knowledge of floriculture	5
<b>Floristry</b>		
12057	Demonstrate knowledge of flowering plants and foliage used in floristry	5
20686	Care for floristry stock and merchandise	5
20687	Prepare and display floristry stock	10
20688	Provide service to floristry customers	5
<b>Food and Related Product Packaging</b>		
7666	Label food and/or related product containers manually	2
<b>Food and Related Product Processing – Cleaning</b>		
7644	Clean and sanitise food or related product production equipment manually	2
<b>Food and Related Product Processing – Safety and Health</b>		
7756	Handle chemicals safely in food or related product production environments	2
<b>Food and Related Product Production</b>		
24527	Communicate in the food and related product processing industry	3
24528	Demonstrate knowledge of food processing industry workplace hygiene and food safety requirements	3



“As employers, we have a responsibility to train our staff to be able to handle the modern farming business. They are the next generation of farmers.”

*Andrew, operations manager*

Std No.	Title	Credits
<b>Food Safety</b>		
20666	Demonstrate a basic knowledge of contamination hazards and control methods used in a food business	2
<b>Forest Establishment</b>		
1232	Demonstrate knowledge of forest planting site preparation	4
<b>Forest Foundation Skills</b>		
22995	Demonstrate knowledge of employment relationships, and work collaboratively in a forestry operation	5
22997	Demonstrate knowledge of principles of commercial forestry	5
22998	Demonstrate forestry foundation skills under supervision for pruning plantation trees	10
22999	Demonstrate forestry foundation skills under supervision for landing operations	10
23000	Demonstrate forestry foundation skills under supervision for plantation forest establishment	10
23001	Demonstrate forestry foundation skills under supervision for breaking out for plantation forestry	10
22994	Demonstrate knowledge of factors that affect the performance of forestry workers	10
17769	Demonstrate knowledge of general health, safety, and environmental requirements in forestry	6
27966	Demonstrate knowledge of general safety requirements for forest entry	3
<b>Forest Operations</b>		
6916	Demonstrate knowledge of the Approved Code of Practice relating to chainsaw use	5
<b>Forest Silvicultural Operations</b>		
6951	Demonstrate knowledge of selecting plantation trees	4
<b>Forestry Knowledge</b>		
1227	Demonstrate knowledge of plantation forest harvesting	3
27963	Demonstrate foundation knowledge of plantation forest establishment and silvicultural operations	5
<b>Fruit Production</b>		
816	Demonstrate knowledge of fruit production in New Zealand	5
21212	Harvest a fruit crop under supervision	5

“In this industry you grow or enter into roles that have fantastic challenges, offer you amazing experiences, equip you with some of the most advanced technology, and you do this as a team growing a business and getting paid.”

*John, Wood Processing Manager*





Std No.	Title	Credits
<b>General Agriculture</b>		
19138	Monitor and interpret weather information	4
19143	Perform calculations for primary production situations	3
19145	Describe hydration, nutrition, and sleep in relation to physical well-being of agriculture workers	4
20797	Demonstrate knowledge of farm practices and farm animal behaviour	3
23540	Demonstrate knowledge of hazards, hazard control, and the consequences of injury in a rural workplace	5
23541	Locate hazards, describe safety procedures, and demonstrate safe work practices in a rural workplace	5
24542	Demonstrate knowledge of the impact of an agriculture system on soils	3
<b>Meat Industry Generic</b>		
20235	Explain health and safety practices in the meat processing industry	3
<b>Non Commercial Forestry Skills</b>		
6917	Demonstrate basic chainsaw operation	8
<b>Nursery Production</b>		
20556	Demonstrate knowledge of plant propagation	10
20570	Demonstrate knowledge of nursery growing media and soils	5
20571	Care for nursery crops	10
<b>Plant Pest, Weed, and Disease Control</b>		
21556	Control weeds under supervision	2
21561	Use, maintain, and store agrichemical personal protective equipment (PPE)	2
27213	Identify and interpret agrichemical product information, and demonstrate knowledge of safety with agrichemicals	5
27215	Prepare to apply, and apply, agrichemicals using hand held equipment	5
<b>Poultry Husbandry</b>		
18012	Demonstrate knowledge of chemical residues, and action taken to minimise residues, in poultry products	2
25110	Catch, pick up, carry, hold, and handle poultry	4
<b>Production Horticulture</b>		
4	Maintain hand tools and service small engines used in horticulture	5
829	Demonstrate knowledge of plant nomenclature	5
2803	Maintain a documented work record of horticultural activities	5
21039	Demonstrate knowledge of the development of organic horticulture	10
22183	Plant out horticulture crops by hand	5
22188	Demonstrate knowledge of irrigation systems used in horticulture	5
22191	Demonstrate knowledge of factors which influence plant growth	5
23781	Grow and pot up plants from stem cuttings	5
20574	Identify plants	5
22174	Demonstrate knowledge of soils and fertilisers	5
22177	Demonstrate knowledge of the structure and function of plants	5
<b>Pulp and Paper Technology</b>		
17858	Demonstrate knowledge of manufacturing processes involved in wood pulping and paper making	10
17856	Demonstrate knowledge of pulp and paper products	3

Std No.	Title	Credits
<b>Saddlery</b>		
6579	Clean and maintain saddlery for horses	2
<b>Seafood Generic</b>		
20309	Describe Maori terminology and concepts relevant to a marine or freshwater activity	2
20935	Describe the Quota Management System in New Zealand	5
<b>Seafood Processing</b>		
16712	Identify seafood species in the New Zealand seafood industry	3
<b>Shearing</b>		
15041	Grind shearing combs and cutters for machine shearing	5
15042	Set up a machine shearing handpiece, and maintain down-tube of shearing plant	5
25853	Shear sheep under supervision	6
<b>Sheep Farming</b>		
577	Dag and crutch sheep with prepared equipment	5
19146	Carry out wool shed tasks during shearing operations	5
19147	Describe the activities and hazards in a wool shed during shearing from a farm perspective	2
19152	Assist with the preparation and handling of lambs for docking	2
24639	Describe how the wearing of sheep teeth affects productivity, and inspect and age sheep teeth	3
24641	Demonstrate knowledge of features, attributes, identification, and records for sheep	2
<b>Sports Turf Management</b>		
1151	Demonstrate knowledge of the characteristics and requirements of sports turf surfaces	10
1152	Demonstrate knowledge of turf botany	5
<b>Stock Control</b>		
11958	Demonstrate knowledge of stock management procedures and systems in a retail or distribution environment	4
11975	Pick and assemble goods for dispatch in a retail or distribution environment	3
<b>Thoroughbred Racing</b>		
1632	Demonstrate knowledge of the thoroughbred racing industry structure	3
<b>Timber Grading</b>		
20754	Demonstrate knowledge of mechanical stress grading of timber	5
<b>Timber Machining</b>		
17960	Perform basic calculations for the operation of wood forming machines and grinders	5
<b>Timber Yarding</b>		
164	Tally timber	3
143	Fillet timber for further processing	3
165	Handle, sort and stack timber	3
<b>Vegetable Production</b>		
25158	Demonstrate knowledge of the vegetable production industry	5
<b>Viticulture</b>		
19939	Pick grapes by hand	5
<b>Water – Generic</b>		
19200	Demonstrate knowledge of, and apply, mathematics in the water industry	3

Std No.	Title	Credits
<b>Wood Manufacturing Foundation Skills</b>		
736	Demonstrate knowledge of physical characteristics of wood	5
17971	Demonstrate knowledge of the solid wood manufacturing industry	5
22973	Demonstrate knowledge of factors that affect the performance of wood manufacturing workers	10
156	Demonstrate knowledge of phytosanitary standards in the wood manufacturing industry	3
162	Demonstrate knowledge of the principles of wood drying	5
15774	Demonstrate knowledge of timber machining	5
16244	Demonstrate knowledge of wood preservation	5
17860	Demonstrate knowledge of principles of matter, energy, and chemistry used in wood manufacturing industries	8
17861	Demonstrate knowledge of principles of heat, energy, and work as used in wood manufacturing	8
27074	Demonstrate knowledge of timber grading	5
160	Demonstrate knowledge of the principles of sawmilling	5
729	Measure moisture content of wood products	5
5638	Demonstrate knowledge of principles of quality systems in the wood manufacturing industries	5
5847	Demonstrate knowledge of timber yard operations	5
8008	Demonstrate knowledge of log yard operations	5
19794	Demonstrate knowledge of business basics in the wood manufacturing industry	5
20766	Describe forest management and log use in solid wood manufacturing	5
22970	Demonstrate employment and interrelationship foundation skills in a wood manufacturing operation	10
22977	Demonstrate knowledge of workplace risks in a wood manufacturing operation	5
22978	Demonstrate knowledge of wood product quality	5
159	Demonstrate knowledge of environmental issues in wood manufacturing industries	5
5634	Demonstrate knowledge of workplace health and safety in the wood manufacturing industries	3
22969	Take and record measurements and make calculations in wood manufacturing	3
21482	Demonstrate knowledge of the wood panels industry and its products	10
17964	Demonstrate knowledge of the wood product manufacturing industry	5
<b>Wool Handling</b>		
15050	Describe wool pressing, press wool as directed, and assist with penning up of sheep	5
15053	Describe the operational requirements of a woolshed environment	5
20119	Describe and demonstrate wool harvesting procedures	5



# Job Profiles

## for the Primary Industries Sector

There are a huge number of roles and occupations available in this sector, ranging from entry level through to high level.

Even for entry level jobs or apprenticeships, NCEA Level 2 is the minimum you need nowadays, because it means you will have a good foundation in the skills and competencies you will need to go further. For other roles, you'll definitely need to further your education after school, by undertaking tertiary study, or training on the job.

More information about all of the roles listed here can be found on the Careers New Zealand Website [www.careers.govt.nz](http://www.careers.govt.nz) along with key information about the job, what it pays, and current opportunities.

To find out the pay, prospects, and study costs of a number of jobs you can also check out the Occupation Outlook – [www.dol.govt.nz/occupation-outlook](http://www.dol.govt.nz/occupation-outlook).



The 'dots' in the following table show the level (or levels) of qualification usually associated with the role. Sometimes you need a specific qualification to get into a job, but in many areas you can work towards higher qualifications by learning on the job. Check out the job profiles on [www.careers.govt.nz](http://www.careers.govt.nz), or talk to your careers advisor to find out more.

	NZQF Level	2	3-4-5	5-6	7	8-10
		NCEA Level 2	Trade Certificate	Diploma	Degree	Postgraduate Degree
Agricultural Technician					•	
Agricultural/Horticultural Consultant					•	
Agricultural/Horticultural Scientist						•
Animal Attendant		•	•			
Aquaculture Farmer		•				
Arborist		•	•			
Beekeeper		•	•			
Biochemist					•	•
Biosecurity Officer				•	•	
Biotechnologist					•	•
Crop Farm Worker						
Crop Farmer		•	•	•		
Dairy Farmer		•		•		
Dairy Products Maker		•	•	•		
Dog Trainer		•		•		
Energy Auditor		•	•	•	•	•
Environmental Engineer					•	
Environmental Scientist					•	•
Farm Worker		•	•			
Farmer/Farm Manager		•	•	•		
Fencer		•	•			
Fishery Officer		•		•		
Fishing Skipper			•			
Food Technologist				•	•	•
Forester			•	•	•	
Forestry and logging worker		•	•			
Forestry Scientist					•	•
Gardener		•				
General Labourer		•	•			
Geologist					•	•
Geophysicist					•	•
Groundsperson		•	•			
Horse Trainer		•	•			
Hunter/Trapper		•	•			
Landscape Architect					•	
Landscape Gardener		•				
Marine Biologist					•	•
Meat Inspector			•			

NZQF Level	2	3-4-5	5-6	7	8-10
	NCEA Level 2	Trade Certificate	Diploma	Degree	Postgraduate Degree
Meat/Seafood Process Worker	•				
Microbiologist				•	•
Nursery Grower/Worker	•				
Packhouse Worker	•				
Production Manager			•	•	
Pulp and Paper Mill Operator	•	•			
Quarantine Inspector				•	
Ranger	•	•			
Saw Doctor	•	•			
Science Technician			•	•	
Shearer	•	•			
Stock and Station Agent	•	•			
Veterinarian				•	
Veterinary Nurse	•		•		
Winemaker		•	•	•	
Wood Processing Worker	•				
Wool Classer	•	•			

“The machines we are working on at the moment are a wide range from manual, refitted to computerised. But the industry is heading in the direction of more computerised machinery and we constantly need to get up to date with the newest technology.”

*Mark Logan, planer mill supervisor*





“There are good stepping stones to make in the dairy industry. You can go from farm manager to sharemilker to owner. Just work hard and the opportunities will come.”

*Jayden, 24, sharemilker*











# Vocational Pathways

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[www.youthguarantee.net.nz](http://www.youthguarantee.net.nz)

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