

# National Certificate in Civil Infrastructure General Introductory Skills Training Plan

## Qualification Requirements

This qualification will be awarded to people who meet the requirements of the core compulsory and elective sections. The trainee must complete a **minimum of 50 credits, but no more than 60 credits**.

## Instructions

Trainees are to indicate (tick) which elective units they wish to complete. Please also indicate whether unit standards will be completed via on-job or off-job training. Two sections are also provided at the end of the training plan to specify appropriate training providers where off-job training is to be carried out, and which assessors will be utilised. An indication of the completion quarter for the workbook should also be given. This form is to be returned to InfraTrain with your Training Agreement.

*Note: The italicised units can only be achieved by attending an off-job course.*

Core Compulsory Units						
All the units listed below are required.						
Unit No.	Unit Standard Title	Level	Credit	On Job	Off Job	Completion Quarter
6401	<i>Provide First Aid</i>	2	1		✓	
6402	<i>Provide resuscitation level 2</i>	1	1		✓	

## Electives

The trainee must select a minimum of 48 credits, **but no more than 58 credits** from the list below. At least 39 of the selected credits must be at level 2 or above.

- A minimum of 10 credits from Elective Set A
- A minimum of 10 credits from Elective Set B
- A minimum of 20 credits from Elective Set C
- The balance of credits, if required, from Elective Set D

## Elective Set A

A minimum of 10 credits is required from the following subfields and domains.

Field	Subfield	Domain
Engineering and Technology	Civil Plant Operation and Management	Civil Plant Operation
	Civil Works and Services	Civil Construction Works Civil Infrastructure Health, Safety, and Environment Demolition
	Highway Construction and Maintenance	Any
	Pavement Surfacing	Any

**InfraTrain recommends that these be chosen from the following unit standards.**

Unit No.	Unit Standard Title	Level	Credit	Elected Units	On Job	Off Job	Completion Quarter
Civil Engineering – Asset Management							
17295	Audit civil engineering infrastructure asset data collection and reporting to ensure its integrity	4	6				
Civil Plant Operation and Management – Civil Plant Operation							
6469	Maintain small plant and equipment on civil construction works	1	2				
6470	Operate a handheld pavement breaker	2	4				
6467	Operate a plate compactor on civil construction materials	2	4				
6465	Operate a power-driven rotary broom	2	2				
19675	Operate a road saw	2	4				
6457	Use generator and compressor for civil construction	2	2				
8560	Deliver, stockpile, and spread aggregates with truck and trailer	3	12				
6468	Operate a mechanical rockbreaker	3	10				
17315	Operate a self-propelled roller on civil construction sites	3	20				
20628	Operate a water cart for earthworks	3	12				
17309	Operate a wheeled loader on civil construction sites	3	20				
Civil Works and Services – Civil Construction Works							
6480	Assist with survey and set-out on civil construction works	1	3				
6472	Carry out manual excavation for civil construction works	1	2				
6477	Hand-spread materials and assist mechanical compacting plant on civil construction works	1	3				
6476	Read and interpret civil construction plans	1	3				
17327	Communicate on civil construction sites	2	3				
17328	Demonstrate fundamental knowledge of earthworks	2	5				
20624	Demonstrate knowledge of bulk earthmoving	2	2				
6453	Demonstrate knowledge of civil construction works	2	3				
20616	Demonstrate knowledge of earthworks in relation to the environment	2	4				

20475	Demonstrate knowledge of forestry earthworks	2	4				
6454	Demonstrate knowledge of safety principles and maintain safety on civil construction works	2	5				
20477	Demonstrate knowledge of soil properties for earthworks	2	3				
6471	Dismantle decommissioned services for civil construction	2	2				
6484	Install gabion baskets for civil construction works	2	4				
6478	Maintain and disestablish temporary civil works sites	2	3				
6475	Maintain records for civil work	2	2				
6452	Maintain, transport, and store roadwork signs for civil construction works	2	3				
6482	Construct interlocking concrete block pavements on civil construction works	3	6				
6473	Construct kerb and channel	3	12				
20474	Demonstrate knowledge of forestry earthworks job prescriptions	3	5				
17501	Demonstrate knowledge of foundation and subgrade on civil construction works	3	5				
6485	Install guard rails, hand rails, and safety barriers on civil construction works	3	5				
6479	Locate and identify services on civil construction sites	3	4				
Civil Works and Services - Demolition							
20216	Supervise demolition work	5	15				
Highway Construction and Maintenance - Road Construction							
6486	Construct vehicle crossings	3	5				
17330	Demonstrate knowledge of the installation and repair of road drainage systems	3	8				
6483	Install pipe culverts and structures on road construction works	3	15				
Highway Construction and Maintenance - Roadmarking							
15928	Demonstrate knowledge of health, safety, and environmental requirements of pavement marking	2	5				
15930	Locate roadmarking site on maps and plans	2	3				
15932	Perform quality assurance testing and sampling for roadmarking	2	4				
15931	Perform routine operation checks on roadmarking plant and equipment	2	4				
18043	Work safely using pilot vehicles for roadmarking on level 1 roads	2	8				
18044	Works safely using pilot vehicles for roadmarking on level 2 and 3 roads	2	5				
15943	Utilise roadmarking maps and plans for plant operation	3	12				
Highway Construction and Maintenance - Roading Maintenance							
11305	Adjust the height of surface boxes for roading maintenance	2	3				
11317	Install and maintain roadside amenities	2	3				
11320	Install and maintain roadside grass verges	2	2				
11313	Maintain footpath in road reserve	2	3				
11308	Maintain road bridge waterways	2	3				

11316	Maintain road by installing and refurbishing traffic signs and delineators	2	2				
11304	Maintain road by repairing chipsealed surfaces	2	3				
11303	Maintain road by repairing unbound pavement layers	2	5				
11314	Maintain road clear of snow and ice	2	3				
11318	Maintain roading median strips and traffic islands	2	2				
11306	Restore pavement using stabilisation techniques	2	5				
11319	Trim and remove trees for roading maintenance	2	2				
11312	Maintain piped stormwater drainage systems in road reserve	3	3				
Highway Construction and Maintenance - Temporary Traffic Control – Lapsing							
5627	Operate as a traffic controller for low volume and level 1 roads	3	4				
5629	Assist with temporary traffic management site closure for Level 2 and 3 roads	2	2				
Pavement Surfacing – Asphalt Surfacing							
13518	Demonstrate handwork, sweeping and traffic control skills associated with hot-mix asphalt work	2	18				
13512	Demonstrate knowledge of operating processes of asphalt production plants	3	6				
13521	Demonstrate knowledge of the compaction of hot-mix asphalt	3	5				
13519	Operate hot-mix asphalt paving machine	3	20				
Pavement Surfacing – Bitumen Surfacing							
13517	Demonstrate handwork, sweeping, and traffic-control skills associated with chipsealing	2	14				
1495	Demonstrate knowledge of the dangers of bitumen handling and the need for safety	2	20				
Please list any additional unit standards you will complete to meet the elective requirements:							
Unit No.	Unit Standard Title	Level	Credit	On Job	Off Job	Completion Quarter	

## Elective Set B

A minimum of 10 credits is required from the following subfields and domains.

Field	Subfield	Domain
Core Generic	Core Generic	Self-management Work and Study Skills
Health	Health Studies	Core Health
	Occupational Health and Safety	Occupational Health and Safety Practice
Humanities	Communication Skills	Interpersonal Communications
Sciences	Mathematics	Measurement
Service Sector	Driving	Core Driving Knowledge and Skills Driver Licence Classes Driver Licence Endorsements

InfraTrain recommends that these be chosen from the following unit standards.

Unit No.	Unit Standard Title	Level	Credit	Elected Units	On Job	Off Job	Completion Quarter
Core Generic – Work and Study Skills							
10780	Complete a work experience placement	1	2				
4249	Demonstrate care and timeliness as an employee	1	3				
12382	Identify the significance of one's work within an employing organisation	1	2				
504	Produce a CV (curriculum vitae)	1	2				
543	Start work in a new workplace	1	3				
1839	Apply a personal ethics pledge within his/her workplace	2	3				
16688	Identify and manage the effects of shift work	2	2				
7118	Manage own learning programme	2	3				
Core Generic – Self-Management							
12348	Demonstrate knowledge of anger and options for dealing with anger issues	1	2				
496	Manage personal wellness	1	2				
548	Plan to manage personal use of alcohol and other drugs	1	2				
7123	Demonstrate knowledge of problem solving and apply a problem solving technique to a problem	2	2				
12355	Demonstrate knowledge of stress and ways of dealing with it	2	2				
12349	Demonstrate time management	2	3				
4258	Describe ways of managing and coping with change	2	2				
524	Operate a personal budget	2	2				
Health Studies – Core Health							
12704	Describe principles of chemistry in the human body for core health	4	5				
12709	Describe the role and responses of the human endocrine system	5	3				
12727	Describe the role and responses of the human reproductive system	5	3				
12712	Describe human immune response and resistance to disease	6	5				

Occupational Health and Safety – Occupational Health and Safety Practice							
497	Protect health and safety in the workplace	1	1				
17593	Apply safe work practices in the workplace	2	4				
19522	Undertake job safety analysis	2	4				
17588	Apply for, accept, and carry out work according to a work permit in the workplace	3	4				
17602	Apply hazard identification and risk assessment procedures in the workplace	3	4				
18426	Demonstrate knowledge of hazards associated with confined space	3	4				
18409	Use a forklift mounted safety platform in the workplace	3	5				
Communication Skills – Interpersonal communications							
3501	Apply listening techniques	1	4				
9707	Demonstrate knowledge of workplace communications requirements	1	5				
10790	Hold a conversation with others	1	2				
1285	Make inquiries and complete practical transactions	1	4				
3503	Participate in a team or group to complete routine tasks	1	2				
1293	Participate in an informal one-to-one face-to-face interview	1	2				
1299	Be assertive in a range of specified situations	2	4				
1294	Be interviewed in a formal situation	2	2				
1277	Communicate information in a specified workplace	2	3				
1304	Communicate with people from other cultures	2	2				
9680	Communicate within an organisational context	2	2				
9677	Participate in groups and/or teams to gather ideas and information	2	3				
10791	Participate in informal meetings	2	3				
9694	Analyse and apply principles of communication process theory	3	4				
9705	Give and receive feedback	3	3				
1312	Give oral instructions in the workplace	3	3				
Mathematics – Measurement							
20662	Make estimates of measurements with common units	1	2				
5228	Take measurements and use calculations to solve measurement problems	1	3				
8492	Use standard units of measurement	1	3				
5241	Use strategies to solve measurement problems	1	3				
Driving – Driver Licence Classes							
16605	Demonstrate knowledge and skills required for full Class 1 driver licence	2	2				
16606	Demonstrate knowledge and skills required for full Class 2 driver licence	2	2				
16607	Demonstrate knowledge and skills required for full Class 3 driver licence	2	2				
16608	Demonstrate knowledge and skills required for full Class 4 driver licence	2	2				

16609	Demonstrate knowledge and skills required for full Class 5 driver licence	2	2				
16610	Demonstrate knowledge and skills required for full Class 6 driver licence	2	2				
17575	Operate a combination vehicle to meet the requirements for a full Class 3 driver licence	3	7				
17574	Operate a motor vehicle to meet the requirements for a full Class 2 driver licence	3	7				
17576	Operate a rigid vehicle to meet the requirements for a full Class 4 driver licence	3	7				
17577	Operate a combination vehicle to meet the requirements for a full Class 5 driver licence	4	8				
Driving – Core Driving Knowledge and Skills							
3461	Demonstrate light motor vehicle safety procedures	1	3				
3465	Describe driving hazards and risk reduction responses to driving hazards	1	2				
3464	Apply knowledge of human risk factors in a self-management strategy for oneself as a driver	2	2				
17676	Carry out start up and shut down procedures on a light motor vehicle and make ready for use	2	3				
17677	Demonstrate knowledge of safe night driving	2	2				
1734	Demonstrate knowledge of stress and health for driving	2	3				
3472	Describe contributing factors and consequences of road crashes	2	1				
3470	Execute low speed manoeuvres in a light motor vehicle	2	1				
3471	Tow a light simple trailer	2	1				
3466	Apply risk reduction techniques while driving	3	4				
Driving – Driver Licence Endorsements							
18496	Demonstrate knowledge and skills for driving a forklift on a road for endorsement F (forklifts)	3	2				
16702	Demonstrate knowledge and skills for driving on a road for endorsement R (rollers)	3	3				
16703	Demonstrate knowledge and skills for driving on a road for endorsement T (tracks)	3	3				
16701	Demonstrate knowledge and skills for driving on a road for endorsement W (wheels)	3	3				
16718	Demonstrate knowledge of law and practice for the transport of Dangerous Goods by road	3	8				
Please list any additional unit standards you will complete to meet the elective requirements:							
Unit No.	Unit Standard Title	Level	Credit	On Job	Off Job	Completion Quarter	

## Elective Set C

A minimum of 20 credits is required from the following subfields and domains.

NB: Unit standards can only be used once to meet the requirements of the qualification, therefore unit standards selected in prior Elective cannot be used again to meet the requirements of this Elective.

Field	Subfield	Domain
Agriculture, Forestry and Fisheries	Horticulture	Amenity Horticulture Arboriculture Landscape Production Horticulture
	Pest Management	Pest Control
	Rural Contracting	Agrichemical Application Agricultural Contracting
Engineering and Technology	Civil Engineering	Any
	Civil Plant Operation and Management	Civil Plant Operation
	Civil Works and Services	Civil Construction Works Civil Infrastructure Health, Safety, and Environment Demolition
	Design	Any
	Highway Construction and Maintenance	Any
	Mechanical Engineering	Engineering – Fabrication Engineering – Measurement Engineering Core Skills Engineering Drawing and Design Mechanical Assembly Metal Surface Finishing Welding
	Motor Industry	Automotive Preventative Maintenance Automotive Workshop Engineering
	Pavement Surfacing	Any
Planning and Construction	Construction Trades	Elementary Construction Skills
	Painting and Decorating	Painting Spray Painting

**InfraTrain recommends that these be chosen from the following unit standards.**

Unit No.	Unit Standard Title	Level	Credit	Elected Units	On Job	Off Job	Completion Quarter
Horticulture – Production Horticulture							
4	Maintain hand tools and service small engines	1	4				
1	Prepare and sow outdoor seedbeds manually	1	1				
823	Demonstrate knowledge of agrichemicals	2	5				
800	Demonstrate knowledge of harvest principles for horticultural crops and use basic harvest techniques	2	3				
2813	Demonstrate knowledge of quality control requirements in horticulture	2	2				
14	Demonstrate knowledge of soil properties	2	4				
772	Demonstrate knowledge of the structure of plants and the functions of the different parts	2	10				
44	Establish and maintain natural shelter	2	2				
20574	Identify plants	2	5				

2803	Maintain a documented work record	2	3				
779	Maintain irrigation systems	2	3				
19	Make minor repairs of horticultural property structures	2	3				
2802	Plant out horticulture crops by hand	2	4				
785	Plant seedlings in open ground	2	1				
838	Pollinate a greenhouse tomato crop	2	2				
829	Use correct botanical nomenclature when writing plant names	2	2				
824	Use, maintain, and store safety equipment for use with agrichemicals	2	2				
12395	Install irrigation systems	3	5				
Horticulture – Amenity Horticulture							
1666	Apply basic gardening techniques	2	6				
1668	Demonstrate knowledge of common amenity plant pests, diseases, and disorders	3	5				
1672	Demonstrate knowledge of pruning and training amenity trees and shrubs	3	3				
1670	Identify and classify trees, shrubs, and climbers used in landscaping and amenity horticulture	3	6				
1671	Identify and plant annuals, herbaceous perennials, and bulbs	3	6				
1669	Identify common weeds in amenity areas and describe control measures	3	4				
1681	Manage conservatories	3	5				
1673	Sow, lay, and maintain amenity turf	3	7				
1667	Use and maintain amenity machinery and equipment	3	3				
Horticulture – Arboriculture							
2763	Demonstrate knowledge of the New Zealand arboriculture industry	2	3				
2765	Plant trees and shrubs	2	4				
2770	Assess a site for amenity trees	3	8				
17261	Carry out groundperson's duties in an arboricultural situation	3	4				
Horticulture – Landscape							
1027	Demonstrate knowledge of the development of the New Zealand landscape	2	3				
991	Demonstrate knowledge of the landscape industry in New Zealand	2	1				
1009	Select timber for landscape features	2	2				
993	Apply soil testing, cultivation and conditioning techniques	3	4				
1001	Carry out primary site preparation for landscape work	3	3				
1003	Contour site and excavate for features in landscape work	3	4				
1010	Define brick and block features in landscape work	3	3				
1012	Define reinforced concrete requirements for use in landscape work	3	3				
1014	Define the requirements of stone features in landscape work	3	3				
12400	Demonstrate knowledge of water features in landscape work	3	4				
1026	Demonstrate understanding of history and traditions of landscaping	3	6				

998	Demonstrate understanding of landscape design principles	3	5				
1021	Draught working drawings for landscaping	3	5				
992	Install drainage systems used in landscaping	3	4				
996	Mix and place concrete to specification in landscape work	3	3				
994	Use chemicals safely in landscape work	3	5				
995	Use fertilisers in landscape work	3	3				
Pest Management – Pest Control							
5059	Demonstrate understanding of safety with agrichemicals	1	1				
5060	Apply an agrichemical using a non-motorised applicator	2	3				
5062	Demonstrate knowledge of plant pests, diseases, disorders, and their control	2	1				
5061	Identify and control weeds	2	3				
5064	Apply an agrichemical using a motorised applicator	3	4				
20931	Control vertebrate pests by shooting	3	6				
Rural Contracting – Agrichemical Application							
6241	Apply agrichemicals using a wiper type applicator	2	2				
17232	Determine application rates for agrichemicals	2	8				
6237	Apply agrichemicals using a gun sprayer	3	6				
6238	Apply agrichemicals using a knapsack motorised mist blower	3	2				
19573	Demonstrate knowledge of agrichemicals and their application	3	8				
Rural Contracting – Agricultural Contracting							
6256	Check and drive a self-propelled agricultural contracting machine	2	3				
19578	Describe and maintain health and safety in an agricultural contracting workplace	2	4				
19577	Perform calculations for agricultural contracting	2	2				
Civil Plant Operation and Management – Civil Plant Operation							
6469	Maintain small plant and equipment on civil construction works	1	2				
20627	Describe the prevention of immobilisation and the recovery of immobilised machines	2	2				
6470	Operate a handheld pavement breaker	2	4				
6467	Operate a plate compactor on civil construction materials	2	4				
6465	Operate a power-driven rotary broom	2	2				
19675	Operate a road saw	2	4				
6457	Use generator and compressor for civil construction	2	2				
Civil Works and Services – Civil Construction Works							
6480	Assist with survey and set-out on civil construction works	1	3				
6472	Carry out manual excavation for civil construction works	1	2				
6477	Hand-spread materials and assist mechanical compacting plant on civil construction works	1	3				
6476	Read and interpret civil construction plans	1	3				

20481	Carry out bore exit and pipe entry tasks for horizontal directional drilling	2	2				
17327	Communicate on civil construction sites	2	3				
17328	Demonstrate fundamental knowledge of earthworks	2	5				
20624	Demonstrate knowledge of bulk earthmoving	2	2				
6453	Demonstrate knowledge of civil construction works	2	3				
20616	Demonstrate knowledge of earthworks in relation to the environment	2	4				
20475	Demonstrate knowledge of forestry earthworks	2	4				
20479	Demonstrate knowledge of horizontal directional drilling	2	2				
6454	Demonstrate knowledge of safety principles and maintain safety on civil construction works	2	5				
20477	Demonstrate knowledge of soil properties for earthworks	2	3				
6471	Dismantle decommissioned services for civil construction	2	2				
6484	Install gabion baskets for civil construction works	2	4				
6478	Maintain and disestablish temporary civil works sites	2	3				
6475	Maintain records for civil work	2	2				
6452	Maintain, transport, and store roadwork signs for civil construction works	2	3				
20480	Prepare for horizontal directional drilling operations and restore the site afterwards	2	2				
17500	Apply quality and testing requirements on civil construction works	3	3				
Civil Works and Services - Demolition							
20211	Describe timber, timber joinery, and recyclable materials in the demolition industry	2	2				
20436	Select, use, and maintain hand tools in demolition work	2	3				
Design – Graphic Communication							
7501	Apply plane geometry and produce development constructions in graphic communication	1	4				
7504	Demonstrate proper use of drawing equipment for graphic communication	1	3				
7500	Produce a datagraphic	1	4				
7502	Produce an instrumental orthographic drawing	1	4				
7503	Produce isometric, oblique, and planometric drawings for graphic communication	1	4				
7506	Use a model to communicate design ideas	1	3				
7499	Use freehand sketching for graphic communication	1	4				
7505	Use rendering to enhance design sketches, and for drawing presentation	1	3				
18995	Produce axonometric drawings	2	3				
7509	Produce circuit and/or systems graphics	2	4				
7508	Produce illustration and advertising graphics	2	4				

18996	Produce perspective and instrumental drawings	2	3				
7512	Produce production drawings to meet final design requirements	2	3				
7507	Use freehand sketching techniques to show design development	2	4				
7521	Produce 2D or 3D models for design and presentation	3	4				
7519	Produce engineering, technological, and systems drawings for graphic communication	4	6				
7518	Produce promotional and marketing graphics	4	6				
Design – Generic Design							
7486	Create and explore visual design elements	1	3				
7485	Interpret a design brief, and select and present information for solutions	1	3				
7488	Present design material	1	3				
7487	Use the design process to solve design problems	1	3				
7490	Apply visual design elements to solve design problems	2	4				
7491	Develop and refine design solutions	2	3				
7489	Identify design problems and carry out investigation	2	4				
7492	Present design work	2	3				
Highway Construction and Maintenance – Road Construction							
6486	Construct vehicle crossings	3	5				
17330	Demonstrate knowledge of the installation and repair of road drainage systems	3	8				
6483	Install pipe culverts and structures on road construction works	3	15				
Highway Construction and Maintenance – Roadmarking							
15928	Demonstrate knowledge of health, safety, and environmental requirements of pavement marking	2	5				
15930	Locate roadmarking site on maps and plans	2	3				
15932	Perform quality assurance testing and sampling for roadmarking	2	4				
15931	Perform routine operation checks on roadmarking plant and equipment	2	4				
18043	Work safely using pilot vehicles for roadmarking on level 1 roads	2	8				
18044	Works safely using pilot vehicles for roadmarking on level 2 and 3 roads	2	5				
Highway Construction and Maintenance – Roading Maintenance							
11305	Adjust the height of surface boxes for roading maintenance	2	3				
11317	Install and maintain roadside amenities	2	3				
11320	Install and maintain roadside grass verges	2	2				
11313	Maintain footpath in road reserve	2	3				
11308	Maintain road bridge waterways	2	3				
11316	Maintain road by installing and refurbishing traffic signs and delineators	2	2				
11304	Maintain road by repairing chipsealed surfaces	2	3				
11303	Maintain road by repairing unbound pavement layers	2	5				

11314	Maintain road clear of snow and ice	2	3				
11318	Maintain roading median strips and traffic islands	2	2				
11306	Restore pavement using stabilisation techniques	2	5				
11319	Trim and remove trees for roading maintenance	2	2				
Highway Construction and Maintenance - Temporary Traffic Control – Lapsing							
5627	Operate as a traffic controller for low volume and level 1 roads	3	4				
5629	Assist with temporary traffic management site closure for Level 2 and 3 roads	2	2				
Mechanical Engineering – Fabrication							
2416	Assemble and mechanically join plate and sheet under supervision	2	10				
16954	Calculate lengths, areas and mass of engineering fabrication materials	2	4				
2415	Form and shape fabrication materials under supervision	2	10				
2414	Lay out and mark off regular fabrication shapes under supervision	2	15				
2417	Mechanically cut fabrication materials under supervision	2	8				
Engineering – Core Skills							
2383	Carry out heat treatment of metal parts	2	5				
2824	Follow safe working practices on an engineering worksite	2	3				
6518	Lubricate machines in industry	2	4				
2395	Select, use and care for, engineering hand tools	2	4				
2396	Select, use and maintain portable hand held engineering power tools	2	4				
12299	Shift loads in the performance of machinery and equipment installation and maintenance	2	3				
Engineering – Measurement							
4432	Identify and convert basic units of measure used in engineering	1	1				
4433	Measure with non-complex devices used in engineering	1	2				
4434	Recognise basic geometric form in engineering	1	1				
4435	Select, use and care for engineering dimensional measuring equipment	2	3				
4436	Select, use and care for engineering marking-out equipment	2	4				
Engineering – Mechanical Assembly							
2389	Assemble and fit precision tooling and mechanical components under supervision	2	4				
2387	Assemble mechanical components under supervision	2	2				
Engineering – Metal Surface Finishing							
19740	Apply surface coatings for production on a manufacturing site	2	6				
Engineering – Welding							
2670	Avoid welding hazards with safe work practices	2	1				
2683	Cut metals using manual thermal processes	3	4				
Motor Industry – Automotive Preventative Maintenance							

15408	Describe motor vehicle safe motoring requirements and general locations of systems and components	1	3				
15407	Demonstrate knowledge of vehicle and/or machine storage procedures	2	1				
237	Describe automotive brake, steering, and suspension systems, and their operation	2	3				
229	Identify the functions and general locations of motor vehicle systems and components	2	5				
247	Prepare a vehicle and/or machine for use and shut-down after use	2	2				
245	Select and apply lubricants and sealants for automotive and related industry applications	2	2				
15409	Select and apply lubricants and sealants in a marine environment	2	2				
Motor Industry – Automotive Workshop Engineering							
3879	Carry out general engineering tasks in the motor body industry	2	4				
227	Carry out general engineering tasks to repair and make automotive components	2	4				
924	Clean automotive components and maintain cleaning equipment	2	1				
11737	Demonstrate knowledge of exhaust shop equipment	2	4				
16113	Demonstrate knowledge of safe working practices in an automotive workshop	2	2				
949	Identify types of lawnmower, their application and mechanical operation	2	3				
226	Perform safe working practices in an automotive workshop	2	2				
230	Repair and manufacture automotive components by oxy-acetylene gas welding	2	3				
15425	Repair hand push mowers	2	1				
228	Select and use hand tools and workshop equipment for an automotive application	2	5				
Pavement Surfacing – Asphalt Surfacing							
13518	Demonstrate handwork, sweeping and traffic control skills associated with hot-mix asphalt work	2	18				
Pavement Surfacing – Bitumen Surfacing							
13517	Demonstrate handwork, sweeping, and traffic-control skills associated with chipsealing	2	14				
1495	Demonstrate knowledge of the dangers of bitumen handling and the need for safety	2	20				
8021	Demonstrate knowledge of plant used in chipsealing construction	3	5				
Water Industry – Water Generic							
17870	Carry out safe practices when working in water and wastewater treatment plants	2	2				
19200	Demonstrate knowledge of, and apply mathematics in the water industry	2	2				
17871	Describe safe practices when working with hazards in water and wastewater treatment plants	2	2				
Water Industry – Water Reticulation							
19213	Demonstrate knowledge of blockage clearance and wastewater maintenance	2	3				

19202	Demonstrate knowledge of trenching, and trenchless pipe installation for water reticulation	2	2			
19206	Select, use, and maintain hand tools and equipment in water reticulation	2	7			
19214	Carry out wastewater pipe unblocking and access chamber maintenance	3	3			
19212	Demonstrate knowledge of wastewater collection systems	3	8			
19215	Demonstrate knowledge of wastewater sewer systems and materials	3	4			
19209	Demonstrate knowledge of water reticulation system cleaning and disinfection	3	4			
19208	Demonstrate knowledge of water supply and reticulation systems	3	8			
19211	Demonstrate knowledge of water supply mains materials and fittings	3	4			
19201	Demonstrate knowledge of, and locate, reticulated services in the water industry	3	4			
19207	Enter, work in, and exit a confined space in the water industry	3	3			
19203	Lay PVC pipes for water reticulation	3	2			
19204	Produce and use as-built plans in the water industry	3	4			
19210	Service, clean, disinfect, and restore reservoirs and reticulation mains	3	4			
Water Industry – Wastewater Treatment						
17877	Operate and monitor a wastewater treatment plant	2	10			
Painting and Decorating – Painting						
1073	Describe, select, use, and maintain paint brushes	2	8			
1071	Describe, select, use, and maintain paint rollers	2	8			
Construction Trades – Carpentry						
13055	Install exterior and interior joinery on site	3	9			
13047	Transport, place, finish and cure concrete on site	3	7			
Construction Trades – Concrete Construction						
12038	Carry out cement based grouting	2	10			
12034	Carry out surface dressing of concrete	2	5			
12033	Cure concrete	2	5			
12040	Distribute concrete by conveyor	2	3			
12025	Place and finish concrete for concrete construction	2	12			
18513	Place and finish exposed aggregate concrete for concrete construction	2	8			
18514	Place and finish imprint concrete for concrete construction	2	4			
18515	Place and finish stencilled concrete for concrete construction	2	6			
18512	Place, apply colour, and finish coloured concrete for concrete construction	2	6			
12023	Pump concrete	2	10			
Construction Trades – Concrete Production						
12012	Maintain concrete batching equipment and machinery	2	5			
12015	Maintain raw materials for concrete	2	5			

12024	Place and finish concrete for pre-casting	2	12				
12018	Carry out glass reinforced concrete pre-cast production operations	3	15				
12019	Carry out routine tests on fresh concrete	3	9				
12014	Coordinate receipt, batching and delivery of orders for concrete	3	8				
12017	Coordinate the handling, dispatch and loading of pre-cast concrete units	3	8				
12013	Produce pre-cast and site mixed concrete	3	5				
12016	Produce pre-cast extruded concrete	3	20				
12011	Produce ready-mixed concrete	3	18				
Construction Trades – Concrete Roof Tiling							
1686	Fix battens for concrete and clay roof tiles	3	5				
1689	Fix full concrete roof tiles	3	4				
1690	Fix part concrete roof tiles	3	6				
1687	Fix underlay for concrete roof tiles	3	4				
1691	Install lead flashings to concrete roof tiles	3	6				
1688	Load concrete roof tiles onto a roof	3	5				
1698	Re-roof an existing concrete tile roof with concrete tiles	3	6				
1685	Carry out preliminary site check for concrete roof tiling	4	8				
1692	Inspect the installation of specialist flashings to concrete roof tiles	4	8				
1694	Install finishes at concrete tile roof terminations	4	8				
Construction Trades – Concrete Technology							
12021	Demonstrate knowledge of concrete construction technology	3	7				
18346	Demonstrate knowledge of curing methods for concrete construction	3	5				
18345	Demonstrate knowledge of handling, placing and finishing concrete	3	12				
12020	Demonstrate knowledge of concrete materials technology	4	8				
18342	Demonstrate knowledge of concrete production	4	10				
18341	Design concrete mixes	5	12				
Construction Trades – Core Construction							
2543	Carry out safe working practices in workplaces	2	4				
2556	Demonstrate knowledge of and select timber	2	6				
2552	Use fixed machinery and describe maintenance requirements for fixed machinery in core construction	2	6				
2550	Use hand tools	2	6				
Construction Trades – Elementary Construction Skills							
12936	Construct a non consent timber framed utility building	2	8				
12932	Construct wooden garden furniture and items of basic construction equipment	2	8				
18672	Describe health and safety requirements for elementary construction projects	2	1				
12931	Identify and prepare an order for fastenings for basic woodworking in elementary construction	2	1				

12941	Prepare sketches and working drawings for elementary construction projects	2	3				
12930	Select and use items of personal protective equipment for basic woodworking	2	1				
12929	Use a circular saw bench and a compound mitre saw for elementary construction	2	2				
12927	Use basic woodworking hand tools for elementary construction work	2	4				
12940	Use elementary construction skills to carry out minor residential maintenance	2	5				
12933	Use elementary construction skills to complete minor concrete works	2	4				
12934	Use elementary construction skills to erect a basic residential fence	2	5				
12935	Use elementary construction skills to erect a spaced residential timber deck	2	8				
12937	Use elementary construction skills to erect a timber pergola	2	5				
12939	Use elementary construction skills to erect basic garden edge retaining walls	2	4				
12938	Use elementary construction skills to lay paving blocks	2	4				
12928	Use portable electric tools to do basic woodworking for elementary construction	2	3				
Construction Trades – Fibre Cement Linings							
6073	Fix fibre cement sheets to interior and exterior ceilings	2	4				
6071	Fix fibre cement sheets to interior surfaces	2	4				
6068	Identify and describe the manufacture of fibre cement sheets and identify accessories	2	2				
6070	Check framing and substrate, setout, and prepare an order for fibre cement sheets for construction	3	6				
Construction Trades – Fibrous Plaster							
4351	Cast flat fibrous plaster sheets	2	3				
4323	Finish fibrous plaster	2	6				
17583	Fix flat fibrous plaster sheets to surfaces	2	8				
4316	Identify and describe the manufacture of fibrous plaster sheets and mouldings	2	2				
Construction Trades – Plaster Board							
6117	Apply paper faced plaster cove	2	2				
4332	Finish plaster board areas	2	6				
4330	Fix flat plaster board to level ceilings	2	4				
4329	Fix flat plaster board to walls	2	4				
4326	Identify and describe the manufacture of plaster board sheets and mouldings	2	2				
Construction Trades – Specialist Interiors							
4345	Identify requirements and prepare an order for materials used for interior proprietary partitions	2	3				
6122	Install interior proprietary partitions	2	5				
4338	Install suspended ceilings	2	5				

List additional unit standards overleaf ...





