

# Programme Regulations for:

## Vocational Pathway - Construction and Infrastructure Sector

Programmes leading to the National Certificate in Educational Achievement (Level 2)

<b>Wintec code:</b>	YP1501	<b>MoE code:</b>	NCEP1T
<b>Level:</b>	2	<b>Credits:</b>	80 credits
<b>Owner:</b>	Centre for Education and Foundation Pathways	<b>Effective Date:</b>	1 January 2022
<b>Delivering:</b>	Centre for Trades		

These regulations should be read in conjunction with the Institute's Academic Regulations.

### 1. Admission and Entry

#### 1.1 General Academic Admission

There is open entry into this programme, although candidates must demonstrate a reasonable likelihood of success.

#### 1.2 Selection Criteria

As part of the selection process candidates may be required to attend an interview. It is required that candidates have not yet achieved the National Certificate in Educational Achievement Level 2 (NCEA L2), are enrolled at a secondary school and currently working towards this qualification.

#### 1.3 English Language Requirements

Candidates who have English as a second language are required to have an International English Language Test System (IELTS) score of 5.5, with no individual band score lower than 5.0; or equivalent.

### 2. Transfer of Credit

Transfer of credit regulations do not apply to this programme.

### 3. Programme Requirements

3.1 Each candidate's programme of study shall comprise optional modules totalling 80 credits from the schedule of modules in section 5 of these regulations, as follows:

- a) All 20 credits from Section A: Literacy and Numeracy;
- b) A total of 60 credits from sections B & C
  - a. With a minimum of 20 credits from Section C: Sector-related standards

### 4. Award of the Qualification

4.1 Students must apply to the New Zealand Qualifications Authority to confirm their eligibility for the award of the National Certificate of Educational Achievement Level 2 with a vocational pathway in Construction and Infrastructure.

### 5. Schedule of Modules

#### Section A: Literacy and Numeracy Requirements

# Programme Regulations for:

	Number / Code	Title	Level	Version	Credits	Assessment Standard Type	Expiry Date	Delivery Year
LITERACY	26622	Write to communicate ideas for a purpose and audience			4	Unit Standard		
	26624	Read texts with understanding			3	Unit Standard		
	26625	Actively participate in spoken interactions			3	Unit Standard		
NUMERACY	26623	Use number to solve problems			4	Unit Standard		
	26626	Interpret statistical information for a purpose			3	Unit Standard		
	26627	Use measurement to solve problems			3	Unit Standard		

## Section B: Recommended Standards for Construction and Infrastructure

	Number / Code	Title	Level	Version	Credits	Assessment Standard Type	Expiry Date	Delivery Year
ENGLISH	91101	Produce a selection of crafted and controlled writing			6	Achievement Standard		
	91102	Construct and deliver a crafted and controlled oral text			3	Achievement Standard		
	91103	Create a crafted and controlled visual and verbal text			3	Achievement Standard		
	91104	Analyse significant connections across texts, supported by evidence			4	Achievement Standard		
	91105	Use information literacy skills to form developed conclusion(s)			4	Achievement Standard		
	91106	Form developed personal responses to independently read texts, supported by evidence			4	Achievement Standard		
MATHEMATICS AND STATISTICS	91256	Apply co-ordinate geometry methods in solving problems			2	Achievement Standard		
	91257	Apply graphical methods in solving problems			4	Achievement Standard		
	91258	Apply sequences and series in solving problems			2	Achievement Standard		
	91259	Apply trigonometric relationships in solving problems			3	Achievement Standard		
	91260	Apply network methods in solving problems			2	Achievement Standard		
	91261	Apply algebraic methods in solving problems			2	Achievement Standard		
	91262	Apply calculus methods in solving problems			4	Achievement Standard		

# Programme Regulations for:

	Number / Code	Title	Level	Version	Credits	Assessment Standard Type	Expiry Date	Delivery Year
GENERIC COMPUTING	2781	Manage and protect data in a personal computer system			3	Unit Standard		
	2783	Demonstrate knowledge of the components of personal computer systems			3	Unit Standard		
	2784	Create and use a computer spreadsheet to solve a problem			3	Unit Standard		
	2786	Create and use a computer database to solve a problem			3	Unit Standard		
	2788	Produce desktop published documents to meet a set brief			5	Unit Standard		
	2790	Use and maintain personal computer peripherals			3	Unit Standard		
	2791	Integrate spreadsheet and database data into word processed documents to meet a set brief			3	Unit Standard		
	5940	Produce a presentation using a desktop presentation computer application			3	Unit Standard		
	5957	Produce schematic diagrams using a computer application			2	Unit Standard		
	20332	Use the Internet for information retrieval in an organisation			3	Unit Standard		
25662	Use digital communications technologies			3	Unit Standard			
GENERIC TECHNOLOGY	91354	Undertake brief development to address an issue			4	Achievement Standard		
	91355	Select and use planning tools to manage the development of an outcome			4	Achievement Standard		
	91358	Demonstrate understanding of how technological modelling supports risk management			4	Achievement Standard		
	91359	Demonstrate understanding of the role of material evaluation in product development			4	Achievement Standard		
	91360	Demonstrate understanding of redundancy and reliability in technological systems			4	Achievement Standard		
	91361	Demonstrate understanding of sociocultural factors, and how competing priorities are managed, in technology			4	Achievement Standard		

# Programme Regulations for:

	Number / Code	Title	Level	Version	Credits	Assessment Standard Type	Expiry Date	Delivery Year
	91362	Demonstrate understanding of the nature of technological outcomes			4	Achievement Standard		
	91363	Demonstrate understanding of sustainability in design			4	Achievement Standard		
	91365	Demonstrate understanding of advanced concepts used in manufacturing			4	Achievement Standard		

## Section C: Sector-related Standards for Construction and Infrastructure

Number / Code	Title	Level	Version	Credits	Assessment Standard Type	Expiry Date	Delivery Year
TE01120	Identify and describe hand tools and checking equipment for drainlaying	2	6	2	Unit Standard	NA	2015
TE02136	Identify and describe hand tools and testing equipment for plumbing	2	5	2	Unit Standard	NA	2015
TE02139	Soft solder metal joints	2	4	3	Unit Standard	NA	2019
TE02142	Apply sealant to joints	3	4	3	Unit Standard	NA	2019
TE05907C	Work safely with electrical equipment	2	7	1	Unit Standard	NA	2015
TE15849	Perform manual soldering and de-soldering procedures for electrotechnology work	2	6	2	Unit Standard	NA	2019
TE15852	Isolate and test low-voltage electrical subcircuits	2	6	2	Unit Standard	NA	2019
TC24354	Demonstrate knowledge of and apply safe working practices in a BCATS environment	2	3	4	Unit Standard	NA	2019
TE24361	Apply mathematical processes to BCATS projects	2	3	3	Unit Standard	NA	2015
TC12936	Construct a non-consent timber framed utility building as a BCATS project	2	6	8	Unit Standard	NA	2021
AS1071	Describe, select, use, and maintain paint rollers	2		8	Unit Standard		
AS1073	Describe, select, use, and maintain paint brushes	2		8	Unit Standard		
AS1121	Identify and describe trade equipment and power tools used for drainlaying	2		2	Unit Standard		
AS1178	Follow safe practices in an electrical workplace	2		3	Unit Standard		
AS12927	Identify, select, maintain, and use hand tools for BCATS projects	2		6	Unit Standard		
AS12932	Construct timber garden furniture and items of basic construction equipment as a BCATS project	2		8	Unit Standard		
AS12933	Complete minor concrete works as a BCATS project	2		4	Unit Standard		
AS12935	Erect a spaced residential timber deck up to one metre high as a BCATS project	2		8	Unit Standard		
AS12936	Construct a non-consent timber framed utility building as a BCATS project	2		8	Unit Standard		

# Programme Regulations for:

AS12937	Erect a timber pergola as a BCATS project	2		5	Unit Standard		
AS14995	Construct free-hand drawings for use in furniture making	2		2	Unit Standard		
AS15846	Demonstrate knowledge of capacitors and semiconductor diodes	2		3	Unit Standard		
AS15847	Demonstrate knowledge of mathematics and mechanics for electrical trades	2		4	Unit Standard		
AS15848	Demonstrate knowledge of safeguards for use with portable electrical appliances	2		2	Unit Standard		
AS15851	Demonstrate knowledge of electrical safety and safe working practices for electrical workers	2		3	Unit Standard		
AS15852	Isolate and test low-voltage electrical subcircuits	2		2	Unit Standard		
AS16230	Demonstrate knowledge of and use adhesives in furniture making	2		2	Unit Standard		
AS16231	Calculate lengths, areas, and costs and percentages of waste for furniture making	2		3	Unit Standard		
AS16232	Use portable power tools for furniture making	2		4	Unit Standard		
AS16235	Demonstrate knowledge of manufactured boards used in furniture operations	2		4	Unit Standard		
AS18909	Set and operate a basic planning machine to produce simple wooden furniture components	2		2	Unit Standard		
AS18915	Use fixing hardware in furniture making	2		3	Unit Standard		
AS18917	Construct hand joints for furniture	2		3	Unit Standard		
AS18918	Construct a furniture carcass	2		6	Unit Standard		
AS19608	Demonstrate knowledge of primary glass manufacture	2		2	Unit Standard		
AS19609	Demonstrate knowledge of glass processes	2		3	Unit Standard		
AS20047	Hand turn wood to produce furniture articles	2		4	Unit Standard		
AS2114	Identify and describe hand tools and testing equipment for gasfitting	2		2	Unit Standard		
AS2115	Identify and describe trade equipment and power tools for gasfitting	2		1	Unit Standard		
AS21209	Demonstrate knowledge of and carry out health and safety procedures for a building construction site	2		4	Unit Standard		
AS2137	Identify and describe trade equipment and power tools used for plumbing	2		1	Unit Standard		
AS21883	Demonstrate knowledge of hazards and precautions for working with gas in plumbing, gasfitting, or drainlaying	2		3	Unit Standard		
AS21973	Perform basic residential grounds maintenance under supervision	2		5	Unit Standard		
AS2199	Use and maintain hand tools for furniture making	2		4	Unit Standard		
AS22040	Perform basic residential flooring maintenance under supervision	2		4	Unit Standard		

# Programme Regulations for:

AS22129	Erect and maintain a basic residential fence and gate as a BCATS project	2		7	Unit Standard		
AS22145	Handle construction materials	2		2	Unit Standard		
AS2220	Set and operate a single boring machine to bore holes in furniture components	2		4	Unit Standard		
AS24350	Identify, select, maintain, and use portable power tools for BCATS projects	2		6	Unit Standard		
AS24351	Demonstrate knowledge of and use specified fixed machinery in the construction of BCATS projects	2		6	Unit Standard		
AS24353	Demonstrate knowledge of and create sketches and drawings for BCATS projects	2		6	Unit Standard		
AS24354	Demonstrate knowledge of and apply safe working practices in a BCATS workplace	2		4	Unit Standard		
AS24357	Receive instructions and communicate information in relation to BCATS projects	2		4	Unit Standard		
AS24358	Plan and monitor the construction of a BCATS project, and quality check the product	2		2	Unit Standard		
AS24360	Demonstrate knowledge of timber and other construction materials used in BCATS projects	2		5	Unit Standard		
AS25062	Perform basic residential cleaning under supervision	2		4	Unit Standard		
AS25064	Perform basic residential carpentry maintenance under supervision	2		5	Unit Standard		
AS25065	Perform basic residential electrical maintenance under supervision	2		5	Unit Standard		
AS25066	Perform basic residential glazing maintenance under supervision	2		3	Unit Standard		
AS25067	Perform basic residential painting and decorating under supervision	2		5	Unit Standard		
AS25069	Perform basic residential roofing maintenance under supervision	2		4	Unit Standard		
AS25070	Explain the properties of conductors, insulators, and semiconductors and their effect on electrical circuits	2		7	Unit Standard		
AS25071	Demonstrate knowledge of electromotive force (e.m.f.) production	2		3	Unit Standard		
AS25319	Demonstrate knowledge of the carpentry industry within a BCATS environment	2		2	Unit Standard		
AS25321	Demonstrate knowledge of the concrete industry within a BCATS environment	2		2	Unit Standard		
AS25322	Demonstrate knowledge of the drainlaying industry within a BCATS environment	2		2	Unit Standard		
AS25325	Demonstrate knowledge of the floor and wall tiling industry within a BCATS environment	2		2	Unit Standard		
AS25327	Demonstrate knowledge of the gasfitting industry within a BCATS environment	2		2	Unit Standard		
AS25329	Demonstrate knowledge of the interior systems industry within a BCATS environment	2		2	Unit Standard		

# Programme Regulations for:

AS25330	Demonstrate knowledge of the joinery industry within a BCATS environment	2		2	Unit Standard		
AS25333	Demonstrate knowledge of the plumbing industry within a BCATS environment	2		2	Unit Standard		
AS25334	Demonstrate knowledge of the roofing industry within a BCATS environment	2		2	Unit Standard		
AS25413	Draw and form simple patterns for plumbing and gasfitting sheet metal components	2		3	Unit Standard		
AS25414	Cut and join sheet metal for plumbing and gasfitting components	2		2	Unit Standard		
AS25425	Apply mathematics in a plumbing, gasfitting, or drainlaying situation	2		3	Unit Standard		
AS2543	Carry out safe working practices in joinery workplaces	2		8	Unit Standard		
AS2544	Demonstrate knowledge of ordering, receiving, handling and storing joinery materials	2		3	Unit Standard		
AS2550	Use hand tools for joinery and related trades	2		6	Unit Standard		
AS2552	Set up and use fixed machinery in the joinery industry under supervision	2		6	Unit Standard		
AS25532	Assemble non-show wood dining chair seat frames	2		2	Unit Standard		
AS25536	Operate a bandsaw to produce furniture components	2		3	Unit Standard		
AS25550	Operate a straight cutting saw to cut square profiled furniture components	2		3	Unit Standard		
AS25551	Operate a dimension saw to produce square profiled furniture components	2		2	Unit Standard		
AS2556	Demonstrate knowledge of timber in the joinery industry	2		6	Unit Standard		
AS25569	Demonstrate knowledge of timber types and insect attack in furniture operations	2		4	Unit Standard		
AS25570	Demonstrate knowledge of abrasives used in furniture production	2		3	Unit Standard		
AS25921	Make a cupboard as a BCATS project	2		6	Unit Standard		
AS5922	Use cutting tools and machines in the performance of electrical installation and maintenance	2		2	Unit Standard		
AS6626	Demonstrate knowledge of electrical and electronic components	2		3	Unit Standard		
AS6916	Demonstrate knowledge of the Approved Code of Practice relating to chainsaw use	2		5	Unit Standard		
AS750	Demonstrate knowledge of electrical test instruments and take measurements	2		2	Unit Standard		
AS91337	Use visual communication techniques to generate design ideas	2		3	Achievement Standard		
AS91338	Produce working drawings to communicate technical details of a design	2		4	Achievement Standard		
AS91339	Produce instrumental perspective projection drawings to communicate design ideas	2		3	Achievement Standard		

# Programme Regulations for:

AS91341	Develop a spatial design through graphics practice	2		6	Achievement Standard		
AS91342	Develop a product design through graphics practice	2		6	Achievement Standard		
AS91343	Use visual communication techniques to compose a presentation of a design	2		4	Achievement Standard		
AS91344	Implement advanced procedures using resistant materials to make a specified product with special features	2		6	Achievement Standard		
AS91345	Implement advanced procedures using textile materials to make a specified product with special features	2		6	Achievement Standard		
AS91346	Demonstrate understanding of advanced concepts used to make textile products	2		4	Achievement Standard		
AS91347	Demonstrate understanding of advanced concepts used to make products	2		4	Achievement Standard		
AS91348	Demonstrate understanding of advanced concepts related to structural frameworks	2		3	Achievement Standard		
AS91349	Demonstrate understanding of advanced concepts related to machines	2		3	Achievement Standard		
AS91350	Make advanced adaptations to a pattern to change the structural and style features of a design	2		4	Achievement Standard		
AS9785	Set and operate a flat bed sander to sand wooden furniture components	2		4	Unit Standard		
AS9786	Set and operate a sanding machine to sand shaped furniture components	2		2	Unit Standard		
TE15849	Perform manual soldering and de-soldering procedures for electrotechnology work	2	6	2	Unit Standard	NA	

## Section D: Non VP related supporting standards for Construction and Infrastructure

TE02139	Soft solder metal joints	2	4	3	Unit Standard	NA	2015
TE02142	Apply sealant to joints	3	4	3	Unit Standard	NA	2015