

School of Construction and Engineering Trades NZ2834

New Zealand Certificate in Construction Trade Skills (Level 3) Carpentry

Student Handbook



NZ Certificate in Construction Trade Skills (Level 3) Carpentry

Available on the Programme site on Moodle

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School Welcome

Neil McDonald (Head of School)

Nau mai, Haere mai. Welcome to the School of Construction and Engineering Trades. The School of Construction and Engineering Trades is proud to offer the best range of trades training in the region. Our programmes provide learning opportunities in a comprehensive range of theoretical and practical skills directly related to the workplace and our graduates are in high demand throughout the many industries we support.

The School of Construction and Engineering Trades offers you a learning environment that is as close to the real world as we can make it. Your learning will go beyond the classroom, and you will spend much of your time developing the hands-on skills which you will require if you are to succeed in your chosen field.

Learning at WelTec is a two-way partnership. You will learn from an experienced team of highly respected and professional tutors. They will do all they can to help you while you are here, but your success will not just depend on us.

You must bring with you a keen attitude to your studies, a willingness to learn, and respect for those around you who also wish to learn.

When you immerse yourself in your programme of study with energy and enthusiasm you will leave here with a qualification that will enable you to build your future. I wish you all the best for your studies.

Ngā mihi Neil McDonald Head of School

Use of Handbook

This handbook provides important information about your programme of study this year. It outlines what you can expect to achieve and regulations that you need to know about.

The <u>Student Guide</u> provides more information about the services that are available at Whitireia and WelTec to help you succeed in your studies. It refers you to policies and procedures that apply to students. The <u>Guide</u> is available in a downloadable version on Moodle and the website and in a printed copy at the School Administration office.

Programme Staff

Henry Ma'alo (Programme Manager)

Mike Pearce (Team Leader)

Tutors

Tui Baker
Richard Carter
Logan Ellis
Trevor Huse
Mike Porteners
Luke Reid
Michael Tregaskis
Mao Leota

Resources

Personal equipment and materials:

Students are required to supply standard stationary items. You will also need to purchase some personal protective equipment (PPE).

Equipment List:

- · Pair of steel cap boots
- Builder's Apron
- 1m Folding Ruler
- Box Cutter Knife
- End Nippers
- Builders Pencil
- Builders Punch
- Square
- Hammer
- Access to Laptop/Computer
- 8m Measuring Tape with millimetres
- Chisel's: 19mm 25mm set
- Dog Bar
- Wet Weather Gear (Optional)
- Pens for taking notes
- 2B8 lecture book/ or A4 size workbook for taking notes or clear file.
- Masks, Gloves, Earmuffs, and glasses will be provided by WelTec.
- Resource books are a class set so stay in class. A digital copy will be uploaded to Moodle.

Programme Aim

Students choose the Carpentry strand to gain knowledge and skills required of entrants to this trade area. Graduates are able to work in the construction trades sector with limited supervision having gained skills and knowledge in health and safety, trade mathematics, hand tools and project work related to different aspects of the construction industry.

Graduate Outcomes

Graduates will be able to:

- 1. Work safely and in accordance with compliance and regulatory requirements in the construction trades sector.
- 2. Communicate effectively with colleagues and customers within the construction industry.
- 3. Read and use specifications and drawings to complete introductory construction projects.
- 4. Perform introductory applied calculations to complete a range of familiar tasks in the construction sector.
- 5. Apply specific carpentry terminology and concepts when carrying out carpentry work in a project environment.
- 6. Apply knowledge of current building technology, materials, fixings, and hardware when carrying out carpentry projects.
- 7. Use current construction and installation processes and techniques while carrying out carpentry projects.
- 8. Carry out assigned carpentry work in a project environment.

Employment Pathways

Graduates of this qualification will be able to enter employment in trades within the construction industry as a labourer or an apprentice. With additional training and/or experience they may go on to further roles in the construction industry as a carpenter.

Pathways to Further Study

People undertaking this qualification may:

- be a school leaver
- have attained the New Zealand Certificate in Foundation Skills Level 2
- build on a pre-trade qualification at Level 1 or 2
- have a background in an area related to the building and construction sector

Holders of this qualification may choose to continue their education towards a higher-level qualification in carpentry such as New Zealand Certificate in Carpentry (Level 4)

Programme Outline

Students completing the carpentry strand complete two core courses (30 credits): workplace safety frameworks and practices and skills for construction trades and six further carpentry specific 15 credit courses (90 credits): carpentry terminology and concepts, construction and installation processes and techniques and the four carpentry project courses, a total of 120 credits.

Course code	Course title	Credits	Pre-requisites
Level 3 Core			
CARP3001	Workplace Safety Fundamentals	15	
CARP3002	Core Construction and Communication Skills	15	
Level 3 Stran	d Specific		
CARP3101	Preliminary Works for Construction	15	
CARP3102	Support Structures for Building Work	15	
CARP3103	Wall Structures for Building Work	15	
CARP3104	Roof Structures for Building Work	15	
CARP3105	Exterior Envelope	15	
CARP3106	Interior Linings and Finishing	15	
	Total Credits	120	

			Work safely and in accordance with compliance and regulatory requirements in the construction trades sector 15 credits	Communicate effectively with colleagues and customers within the construction industry 5 credits	Read and use specifications and drawings to complete simple construction projects 5 Credits	Perform introductory applied calculations to complete a range of familiar tasks in the construction sector 5 Credits	Collaborate with other trades in the completion of projects utilising generic construction industry terminology 5 Credits	Identify and correctly use hand tools and materials to complete familiar tasks in the allied trades 5 Credits	Execute assigned project work for allied trades.	Apply specific carpentry terminology and concepts when carrying out carpentry work in a project environment. 10 Credits	Apply knowledge of current building technology, materials, fixings, and hardware when carrying out carpentry projects. 10 Credits	Use current construction and installation processes and techniques while carrying out carpentry projects. 10 Credits	Carry out assigned carpentry work in a project environment. 60 Credits	Apply current joinery terminology when carrying out joinery work in a project environment.	Apply knowledge of the types of timbers, panel products, fixings and hardware to joinery projects.10 Credits	Follow the sequence of machining, construction for assembling and installing joinery items while carrying out joinery projects. 10 Credits	Carry out assigned joinery work in a project environment. 30 Credits
Course Code & Title	Cou	rse Aim & omes Assessment	GPO 1	GPO 2	GPO 3	GPO 4	GPO 5	GPO 6	GPO 7	GPO 8	GPO 9	GPO 10	GPO 11	GPO 12	GPO 13	GPO 14	GPO 15
ALLIED TRADE STR		7.ccccomont	0101	0.02	0,00	0104	0.00	0.00	0.07	3, 3 3	0,00	10	••	01 0 12	0.010	01 0 14	10
CARP3001	Aim	The aim of this course is to develop the knowledge, skills, and attributes to work safely in a construction trades environment.															
Workplace	LO1	Explain legislation relevant to specific tasks in the construction trades industry.	√														
Safety Fundamentals	LO2	Apply safe working practices when completing tasks in a construction trades environment.	✓					✓	✓		✓	✓	✓			✓	✓
	LO3	Maintain a safe work environment for the duration of construction trades tasks.	✓						✓								✓
CARP3002	Aim	The aim of this course is to develop the knowledge, skills, and attributes to utilise core construction and communication skills.															
Core Construction	LO1	Interpret basic drawings and specifications to complete simple tasks for construction trades.			✓				✓				✓				✓
and Communication	LO2	Perform calculations to solve simple problems relevant to a construction trades environment.				✓			√				✓				✓
Skills	LO3	Demonstrate effective communication, with colleagues and customers, appropriate for the construction trades environment.		✓			✓		✓				✓				√
CARP3101	Aim	The aim of this course is to develop the knowledge, skills, and attributes to participate in the preparation of a building site for a construction project.															
Preliminary Works for	LO1	Prepare a building site under supervision to meet plans and specifications for a construction project.	✓	√	✓	✓				✓	✓	✓	✓				
Construction	LO2	Identify sub-contractors' roles in construction projects.		✓													
CARP3102	Aim	The aim of this course is to develop the knowledge, skills, and attributes to participate in the construction of support structures and floor systems.															
Support Structures for	LO1	Identify the fundamentals of support structures and floor systems for building work.	✓	√						✓	√	√	✓				
Building Work	LO2	Construct basic support structures and floor systems under supervision in line with plans and specifications for a building project.	✓							✓	√	✓	✓				

			Work safely and in accordance with compliance and regulatory requirements in the construction trades sector 15 credits	Communicate effectively with colleagues and customers within the construction industry 5 credits	Read and use specifications and drawings to complete simple construction projects 5 Credits	Perform introductory applied calculations to complete a range of familiar tasks in the construction sector 5 Credits	Collaborate with other trades in the completion of projects utilising generic construction industry terminology 5 Credits	Identify and correctly use hand tools and materials to complete familiar tasks in the allied trades 5 Credits	Execute assigned project work for allied trades.	Apply specific carpentry terminology and concepts when carrying out carpentry work in a project environment. 10 Credits	Apply knowledge of current building technology, materials, fixings, and hardware when carrying out carpentry projects. 10 Credits	Use current construction and installation processes and techniques while carrying out carpentry projects. 10 Credits	Carry out assigned carpentry work in a project environment. 60 Credits	Apply current joinery terminology when carrying out joinery work in a project environment.	Apply knowledge of the types of timbers, panel products, fixings and hardware to joinery projects. 10 Credits	Follow the sequence of machining, construction for assembling and installing joinery items while carrying out joinery projects. 10 Credits	Carry out assigned joinery work in a project environment. 30 Credits
Course Code & Title	Cou	rse Aim & Assessment	GPO 1	GPO 2	GPO 3	GPO 4	GPO 5	GPO 6	GPO 7	GPO 8	GPO 9	GPO 10	GPO 11	GPO 12	GPO 13	GPO 14	GPO 15
CARP3103	Aim	The aim of this course is to develop the knowledge, skills, and attributes to participate in the construction of wall structures.															
Wall Structures	LO1	Fabricate and erect framed wall structures in line with plans and specifications for a building project.	✓	√	✓	✓				✓	✓	✓	✓				
for Building Work	LO2	Employ safe working practices when handling construction materials on building sites.	✓							✓	✓	✓	✓				
CARP3104	Aim	The aim of this course is to develop the knowledge, skills, and attributes to participate in the construction of roof structures.															
Roof	LO1	Erect framed roofing structures in line with plans and specifications for a building project.	√	√	✓	✓				✓	✓	√	✓				
Structures for Building Work	LO2	Maintain a safe work environment for roofing work on a building project.	✓									✓	✓				
CARP3105	Aim	The aim of this course is to develop the knowledge, skills, and attributes to participate in the installation of exterior envelope systems.															
Exterior Envelope	LO1	Install a range of external cladding and accessories in line with plans and specifications for exterior envelope projects.	√	✓	√	✓				√	√	√	√				
	LO2	Describe the preparation and installation of roofing material for exterior envelope projects.			✓	✓				✓	✓		✓				
CARP3106		The aim of this course is to develop the knowledge, skills, and attributes to participate in the fit out of the interior of a building.															
Interior Linings	LO1	Install interior linings and trim in line with plans and specifications for a building project.	✓		✓	✓				✓	✓	✓	✓				
and Finishing	LO2	Install a range of building hardware and door furniture using manufactures specifications and best practice in a building project.	✓		√					✓	✓	✓	✓				

Timetable

This is a one-year programme, taught over 4 days at our Whitireia Campus in Porirua and our Regional School of Construction campus in Petone.

*Classes for this programme are from Monday to Thursday, 9:00am - 3:00pm

Progress Through the Programme

To pass each course, students must achieve competence in all assessments to pass each course, this programme allows resits at the tutor's discretion.

Award of Qualification

This programme is completed within the enrolment period.

Students must successfully complete all courses to be awarded the New Zealand Certificate in Construction Trade Skills (Level 3)

Teaching and Learning Methods

A variety of learning and teaching activities are planned throughout the programme to meet the learning outcomes of courses. These activities are allocated time within the overall programme hours and more specifically identified within each course.

Learning activities in the programme include:

Tutorials

Facilitated or led by tutors to provide information and direction and to encourage students to discuss their understanding of the topics, gain clarification of key concepts and provide a platform for further work.

Group activities

To facilitate student learning through group activities and peer support.

Practical demonstration

To facilitate student learning by observation and by practise.

Projects

To introduce students to real work situations and processes.

Interactive lectures

To enable the tutor and students to share and gain new knowledge.

Online learning activities

The intention of requiring students to develop competency with eLearning technologies is to prepare them for the workplace using electronic communication as an adjunct to classroom and workshop/lab activity. Students will document their engagement by posting comments and reflections on readings or case studies and scenarios, or to contribute to group problem-solving processes and explore solutions.

Peer and self-assessments

Many tasks lend themselves to peer and/or self-assessment. Peer- and self-assessment reflect both the contexts in which graduating students will work and the practices of working independently and in collaborative teams. They promote the development of reflection and critique and, where employed, will be carried out with agreed and explicit criteria.

Project based learning activities and simulated workshop learning

A project-based learning approach will be used to enable graduates to be work-ready through the use of real world examples that require a problem solving approach. The programme will include learning activities designed to replicate the ongoing professional career development of a construction trades worker through application of knowledge to authentic tasks. Activities will include interactions with industry professionals and other agencies employing construction trades professionals.

The methods used in terms of embedding language, literacy and numeracy will be through scaffolding the learning through contextually driven approaches. Therefore, resources, strategies and activities will clearly demonstrate how embedding is taking place.

Assessment

The programme uses competency–based assessment.

The following assessment methods are used as formative and/or summative tools. Each method identified may be utilised to assess theory and/or practical applications and may utilise on-line learning where appropriate.

Portfolio of achievement

Portfolios may be defined as "a collection of physical evidence of [learning] and achievements". Portfolios gather all of the students learning into one place and enable them to present examples and evidence of their work in a coherent way for both assessors and potential employers. Portfolios are employed throughout the programme in a number of courses. The intention of the portfolio is for all students to:

- 1. Record examples of their learning process associated with course materials. These entries may be made available for feedback (also known as formative assessment which does not contribute to grading and marks).
- 2. To record and make available evidence for assessments to demonstrate meeting specific course learning outcomes (summative assessments).
- 3. Personal development or planning (used for certification or registration and usually involves a review process, action plan, and recognition of required professional criteria).
- 4. Present or showcase their developing and 'best' work and accomplishments either during study or on work placement.

Students are made responsible for enabling the course facilitators and assessment markers to have access to the relevant portfolio documents for assessment purposes. Students will have control over which aspects of content they want to share with peers. Except in the case of portfolio assessments, students will also have control over which content they want to share with facilitators.

A portfolio of achievement may include evidence from:

Written tests

Written tests may be closed or open-book and are a measure of learning within a controlled environment. Whilst examinations are generally held at the end of a course, tests are normally completed during a course to ensure that students are assimilating material as the course progresses. Tests and examinations can include, short answer, and/or multiple choice questions.

Practice assessments

These may include simulation of real life scenarios, demonstration of practical skills and role-playing. Outcomes of practice tasks will be measured against standards that are clearly laid out. Assessment may involve tutor, self or peer participation. Evidence of achievement will be noted into the students' portfolio of achievement.

Online learning activities

The intention of requiring students to develop competency with eLearning technologies is to prepare them for the workplace using electronic communication as an adjunct to classroom and workshop/lab activity. Students will be documenting their engagement by posting comments and reflections about readings or case studies and scenarios, or to contribute to group problem-solving processes and explore solutions.

Peer and self-assessments

Many tasks lend themselves to peer and/or self-assessment. Peer- and self-assessment reflect both the contexts in which graduating students will work and the practices of working independently and in collaborative teams. They promote the development of reflection and critique and, where employed, will be carried out with agreed and explicit criteria.

Project based learning tasks and simulated workshop tasks

A project based learning approach will be used to enable graduates to be work–ready through the use of real world examples that require a problem solving approach. The programme will include learning activities designed to replicate ongoing professional career development through application of knowledge to authentic tasks. Activities will include interactions with construction professionals, industry and other agencies employing construction trades professionals.

All assessments will be aligned to the level of the programme in terms of the literacy and numeracy required and recognise the literacy and numeracy of the learners. This will help to ensure that the language of the assessment does not become a barrier to learners achieving the measurable vocational and content specific outcomes of the program.

Both formative and summative assessment of foundational competencies will occur in association with other learning outcomes where appropriate.

Personal Responsibility

We are committed to providing a safe and positive learning and working environment for all students, so everyone can meet their learning goals. You can expect to be treated with fairness, dignity and respect by staff and other students. For further information on what we will provide and what is expected of you as a student please <u>click here</u>

Course Outlines

WORKPLACE SAFETY FUNDAMENTALS									
Course code	CARP3001	Level	3	Credits	15				
Pre-requisites	Nil	Co-requisi	tes	Nil					
Main programme	New Zealand Certificate in Construction Trade Skills (Level 3)	Strand		Allied Trade	es				
Delivery modes	Provider-based		Total lea	arning hours	150				

Content

Introductory knowledge and skills relevant to:

Legislative frameworks

- Health and safety legislation
- The New Zealand Building Code
- Licensing requirements
- Employment legislation
- Resource Management Act
- Local bylaws

Safe working practices

- Working at height
- Electrical safety and compliance
- Personal protective equipment and personal protective clothing
- Hazard identification and management
- First Aid
- Safe use of hand and power tools
- Sourcing and gathering information for the construction trades sector including material specifications, safety data sheets, health and safety processes and procedures

Assessments

Assessment activity	Learning outcomes
Assessment portfolio Will employ a range of elements drawn from approved methods to align with the context of the learning (delivery mode, regional specific requirement, etc.) and any particular needs of the group of ākonga.	All

Successful completion of course

Learners/ākonga must pass all assessments to be competent in this course including carrying out all tasks in a safe manner and to industry standard

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to work safely in a construction trades environment.

Ngā H	lua o te Ako Learning Outcomes	Ngā Tūtohu o te Kiko Indicative Content
	the successful completion of this course, a will be able to	
LO1	Explain legislation relevant to specific tasks in the construction trades industry. [GPO 1]	 Health and Safety NZ Building Code Licensing requirements Employment legislation Resource Management Act Local bylaws
LO2	Apply safe working practices when completing tasks in a construction trades environment. [GPO 1, 6, 7, 9, 10, 11, 14, 15]	 Hazard identification and management (incl. identifying hazardous materials) Personal protective equipment and personal protective clothing First Aid Safe use, care, and maintenance of construction trades tools and equipment
LO3	Maintain a safe work environment for the duration of construction trades tasks. [GPO 1, 7, 11, 15]	 Sourcing and gathering information for the construction trades sector including: material specifications, safety data sheets, health and safety processes and procedures, job role responsibilities

CORE CONSTRUCTION AND COMMUNICATION SKILLS								
Course code	CARP3002	Level	3	Credits	15			
Pre-requisites	Nil	Co-requisites		Nil				
Main programme	New Zealand Certificate in Construction Trade Skills (Level 3)	Strand		Allied Trade	es			
Delivery modes	Provider-based		Total lea	arning hours	150			

Content

Introductory knowledge and skills relevant to:

Specifications and drawings

- Basic plan drawings such as elevations, plan view, sections, details, North compass orientation, site plans
- Simple project specifications, including quality, materials, finishes, safety, performance requirements

Communication skills

- Receiving and following instructions
- Team work
- Communication techniques
- Contribution to toolbox meetings
- Gathering and presentation of evidence of trade-related experiences
- Self-management
- Cultural awareness

Calculations

- Area, linear length, volume, angles, triangle and rectangular lengths
- Using formulae to calculate numerical problems
- Percentages, GST, wastage
- Quantities for materials simple projects

Assessments

Assessment activity	Learning outcomes
Assessment portfolio Will employ a range of elements drawn from approved methods to align with the context of the learning (delivery mode, regional specific requirement, etc.) and any particular needs of the group of ākonga.	All

Successful completion of course

Learners/ākonga must pass all assessments to be competent in this course including carrying out all tasks in a safe manner and to industry standard

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to utilise core construction and communication skills.

Ngā H	lua o te Ako Learning Outcomes	Ngā Tūtohu o te Kiko Indicative Content				
Upon	the successful completion of this course, āko	onga will be able to				
LO1	Interpret basic drawings and specifications to complete simple tasks for construction trades. [GPO 3, 7, 11, 15]	Simple project specifications: Quality Materials Finishes Safety Performance requirements Basic Plan drawings Elevations Plan view Sections Details North compass orientation Site plans				
LO2	Perform calculations to solve simple problems relevant to a construction trades environment. [GPO 4, 7, 11, 15]	 Area Linear length Volume Angles Triangle and rectangular lengths Quantities for materials Percentages GST Wastage 				

PRELIMINARY WORKS FOR CONSTRUCTION									
Course code	CARP3101	Level	3	Credits	15				
Pre-requisites	Nil	Co-requisi	tes	Nil					
Main programme	New Zealand Certificate in Construction Trade Skills (Level 3)	Strand		Allied Trade	s				
Delivery modes	Provider-based		Total lea	arning hours	150				

Content

Introductory knowledge and skills relevant to:

Carpentry concepts

- Line
- Level
- Square
- Plumb

Carpentry terminology

- Glossary of commonly used terms
- Specific terminology used in relation to building plans
- Specific terminology used in relation to working drawings and calculations
- Specific terminology used for carpentry calculations

Building technology

- Technical processes and methods of assembling buildings
- Assembling materials into a structure
- Practical application of knowledge using technical processes and, methods and knowledge
- Materials/products

Assessments

Assessment activity	Learning outcomes
Assessment portfolio Will employ a range of elements drawn from approved methods to align with the context of the learning (delivery mode, regional specific requirement, etc.) and any particular needs of the group of ākonga.	All

Successful completion of course

Learners/ākonga must pass all assessments to be competent in this course including carrying out all tasks in a safe manner and to industry standard

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to participate in the preparation of a building site for a construction project.

Ngā H	lua o te Ako Learning Outcomes	Ngā Tūtohu o te Kiko Indicative Content
Upon the successful completion of this course, ākonga will be able to		
LO1	Prepare a building site under supervision to meet plans and specifications for a construction project. [GPO 1, 2, 3, 4, 8, 9, 10, 11]	 Environmental and legal requirements of a building site Using literacy and numeracy to interpret drawings and make calculations Site establishment plans Building set-out Building site terminology Preparing for construction activities Safe working practices Demolition process Waste management including sustainability Establishing levels on a building site Setting-up and operating levelling equipment incl: Types of levelling equipment Safe use and operation of equipment
LO2	Identify sub-contractors' roles in construction projects. [GPO 2]	 Specific roles and works of sub-contractors Relationships with sub-contractors

SUPPORT STRUCTURES FOR BUILDING WORK					
Course code	CARP3102	Level	3	Credits	15
Pre-requisites	Nil	Co-requisi	tes	Nil	
Main programme	New Zealand Certificate in Construction Trade Skills (Level 3)			Allied Trade	es
Delivery modes	Provider-based	Total learning hours 150			

Content

Introductory knowledge and skills relevant to:

Construction processes and techniques

- The construction sequences
- Planning
- Pre-site investigations
- Construction techniques
- Construction sequence and planning
- Demolition

Installation processes and techniques

- Waterproofing
- Damp proofing
- Weatherproofing

Properties and performance

- Timber
- Composite products
- Concrete
- Steel
- Interior/exterior linings
- Interior/exterior fixings

Assessments

Assessment activity	Learning outcomes
Assessment portfolio Will employ a range of elements drawn from approved methods to align with the context of the learning (delivery mode, regional specific requirement, etc.) and any particular needs of the group of ākonga.	1,2,3

Successful completion of course

Learners/ākonga must pass all assessments to be competent in this course including carrying out all tasks in a safe manner and to industry standard

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to participate in the construction of for support structures and floor systems.

Ngā H	ua o te Ako Learning Outcomes	Ngā Tūtohu o te Kiko Indicative Content
Upon the successful completion of this course, ākonga will be able to		
LO1	Identify the fundamentals of support structures and floor systems for building work. [GPO 1, 2, 8, 9]	 Terminology for support structures and floor systems Materials and construction processes Communication routines Safe working practices
LO2	Construct basic support structures and floor systems under supervision in line with plans and specifications for a building project. [GPO 1, 8, 9, 10, 11]	 Materials and construction process for timber, concrete support and floor structures may incl: Excavations and fill Framed Floors Piles for foundations Deck construction Timber Ramps Slab on ground Raft foundations Reinforcing Concrete

SUPPORT STRU	SUPPORT STRUCTURES FOR BUILDING WORK					
Course code	CARP3103	Level	3	Credits	15	
Pre-requisites	Nil	Co-requisi	tes	Nil		
Main programme	rogramme New Zealand Certificate in Strand Construction Trade Skills (Level 3)		Allied Trade	s		
Delivery modes	Provider-based		Total le	arning hours	150	

Content

Introductory knowledge and skills relevant to:

Preliminary work

- Site establishment and maintenance
- Set-out
- Consenting, quality and compliance:
- Documentation requirements

Assessments

Assessment activity	Learning outcomes
Assessment portfolio Will employ a range of elements drawn from approved methods to align with the context of the learning (delivery mode, regional specific requirement, etc.) and any particular needs of the group of ākonga.	All

Successful completion of course

Learners/ākonga must pass all assessments to be competent in this course including carrying out all tasks in a safe manner and to industry standard

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to participate in the construction of wall structures.

Ngā H	lua o te Ako Learning Outcomes	Ngā Tūtohu o te Kiko Indicative Content
Upon the successful completion of this course, ākonga will be able to		
LO1	Fabricate and assemble framed wall structures in line with plans and specifications for a building project. [1, 2, 3, 4, 8, 9, 10, 11]	 Timber framing, pre-nail, loose Steel framing, prefabricated, loose Structural steel beams Laminated beams Proprietary fixings specific to wall structures in residential building Using hand and power tools safely Measuring and cutting materials accurately Material types and uses
LO2	Employ safe working practices when handling construction materials on building sites. [1, 9, 10, 11]	 Safe working practices for handling and storing materials for use in building work Loading and safely stacking construction materials Dismantling and removing construction materials Waste management

ROOF STRUCTURES FOR BUILDING WORK					
Course code	CARP3104	Level	3	Credits	15
Pre-requisites	Nil	Co-requisi	tes	Nil	
Main programme New Zealand Certificate in Construction Trade Skills (Level 3)		Allied Trade	s		
Delivery modes	Provider-based		Total le	arning hours	150

Content

Introductory knowledge and skills relevant to:

Foundations associated with a defined carpentry project

- Formwork for footings
- Associated work operations
- Pile foundations

Support structures associated with a defined carpentry project

- Framed floors
- Concrete floors

Assessments

Assessment activity	Learning outcomes
Assessment portfolio Will employ a range of elements drawn from approved methods to align with the context of the learning (delivery mode, regional specific requirement, etc.) and any particular needs of the group of ākonga.	All

Successful completion of course

Learners/ākonga must pass all assessments to be competent in this course including carrying out all tasks in a safe manner and to industry standard

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to participate in the construction of roof structures.

Ngā H	lua o te Ako Learning Outcomes	Ngā Tūtohu o te Kiko Indicative Content
Upon the successful completion of this course, ākonga will be able to		
LO1	Erect framed roofing structures in line with plans and specifications for a building project. [1, 2, 3, 4, 8, 9, 10, 11]	 Timber / metal prefabricated roof structures Roofing designs Flat roofs and Boxed gutters Soffit, verge and valley framing Ceiling battens, metal, timber Bracing / Roof penetrations / sarking Proprietary fixings specific to roofing for residential building Material types and uses
LO2	Maintain a safe work environment for roofing work on a building project. [GPO 1, 10, 11]	 Sourcing and gathering project specific information: material specifications, safety data sheets, Health and safety processes and procedures for: materials and tools working at height

EXTERIOR ENVELOPE					
Course code	CARP3105	Level	3	Credits	15
Pre-requisites	Nil	Co-requisites		Nil	
Main programme	New Zealand Certificate in Construction Trade Skills (Level 3)	Strand		Allied Trades	
Delivery modes	ivery modes Provider-based Total learning hours 150			150	

Content

Introductory knowledge and skills relevant to:

Frames and related structures

- Walls
- Roofs
- Ceilings
- May include posts and beams

Exterior envelope

- Roof cladding
- Joinery
- Wall claddings

<u>Assessments</u>

Assessment activity	Learning outcomes
Assessment portfolio Will employ a range of elements drawn from approved methods to align with the context of the learning (delivery mode, regional specific requirement, etc.) and any particular needs of the group of ākonga.	All

Successful completion of course

Learners/ākonga must pass all assessments to be competent in this course including carrying out all tasks in a safe manner and to industry standard

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to participate in the installation of exterior envelope systems.

Ngā Hua o te Ako Learning Outcomes Upon the successful completion of this course, ākonga will be able to		Ngā Tūtohu o te Kiko Indicative Content		
LO2	Describe the preparation and installation of roofing material for exterior envelope projects. [GPO 3, 4, 8, 9]	 Roofing types, materials and their characteristics Specifications and drawings Building code requirements 		

INTERIOR LININGS AND FINISHING							
Course code	CARP3106	Level	3	Credits	15		
Pre-requisites	Nil	Co-requisites		Nil			
Main programme	New Zealand Certificate in Construction Trade Skills (Level 3)	Strand		Allied Trades			
Delivery modes	Provider-based	Total learning hours 150		150			

Content

Introductory knowledge and skills relevant to:

Interior lining and finishing

- Insulation
- Linings
- Finishing trim
- Joinery
- Hardware

<u>Assessments</u>

Assessment activity	Learning outcomes
Assessment portfolio Will employ a range of elements drawn from approved methods to align with the context of the learning (delivery mode, regional specific requirement, etc.) and any particular needs of the group of ākonga.	All

Successful completion of course

Learners/ākonga must pass all assessments to be competent in this course including carrying out all tasks in a safe manner and to industry standard

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to participate in the fit out of the interior of a building.

Ngā H	lua o te Ako Learning Outcomes	Ngā Tūtohu o te Kiko Indicative Content
Upon the successful completion of this course, ākonga will be able to		
LO1	Install interior linings and trim in line with plans and specifications for a building project. [GPO 1, 3, 4, 8, 9, 10, 11]	 Preparation routines for interior linings Pre lining checks / Straightening / installation of bracing and linings Thermal and sound insulation systems Internal joinery components Installation techniques Stairs Finishing trim
LO2	Install a range of building hardware and door furniture using manufactures specifications and best practice in a building project. [GOP 1, 3, 8, 9, 10, 11]	 Building Hardware and door furniture Installation techniques