

School of Construction and Engineering Trades NZ2834

New Zealand Certificate in Trade Skills (Level 3) Allied Trades

Student Handbook



NZ Certificate in Construction Trade Skills (Level 3) Tiling

NZ Certificate in Construction Trade Skills (Level 3) Painting and Decorating

NZ Certificate in Construction Trade Skills (Level 3) Plastering

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)

Phil Moen
Anouska Dewe
Bruce Deans

Resources

Allied Trades - Painting

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
- Painting overalls or pants, or shorts.
- 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.

Allied Trades - Plastering and Tiling

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
- 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

Ākonga choose the Allied Trades strand to gain knowledge and skills required of entrants to these trade areas. 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

Graduate Profile

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. Collaborate with other trades in the completion of projects utilising generic construction industry terminology.
- 6. Identify and correctly use hand tools and materials to complete familiar tasks in the allied trades
- 7. Execute assigned project work for allied trades.

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 such as plasterer, painter, or tiler.

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 such as:

New Zealand Certificate in Painting and Decorating (Level 4)

New Zealand Certificate in Construction Related Trades (Level 4)

Programme Outline

Content

Students completing the allied trades strand complete two core courses (30 credits): workplace safety and skills for allied trades while also completing two further 15 credit courses focussing on their chosen allied trade: terminology, job role knowledge and consenting/compliance and the allied trades project, a total of 60 credits.

Course code	Course title	Credits	Pre- requisites				
Level 3 Core	Level 3 Core						
CARP3001	Workplace Safety Fundamentals	15					
CARP3002	Core Construction and Communication Skills	15					
Level 3 Strand	Specific						
CARP3501	Allied Trades Tools, Materials, and Terminology	15					
CARP3502	Allied Trades Projects	15					
	Total Credits	60					

<u>Timetable</u>

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

			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	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. 20 Credits	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 &		rse Aim &			222.0		222.	222.0			0000	GPO	GPO	272.42	272.42	22244	GPO
Title ALLIED TRADE STR	Outco AND	nmes Assessment Assessment	GPO 1	GPO 2	GPO 3	GPO 4	GPO 5	GPO 6	GPO 7	GPO 8	GPO 9	10	11	GPO 12	GPO 13	GPO 14	15
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	The aim of this course is to develop the knowledge, skills, and attributes to work safely in a construction trades environment.	√														
Workplace Safety Fundamentals	LO2	The aim of this course is to develop the knowledge, skills, and attributes to work safely in a construction trades environment.	√					√	✓		√	√	√			√	✓
- unuumomuio	LO3	The aim of this course is to develop the knowledge, skills, and attributes to work safely in a construction trades environment.	√						√								
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.		√			✓		✓				✓				✓
CARP3501	Aim	The aim of this course is to develop the knowledge, skills, and attributes to identify and use tools, materials and terminology employed to complete a range of familiar tasks in allied trades project work.															
Allied Trades	LO1	Identify and correctly use common hand tools and materials used in an allied trade.	✓					✓	✓								
Tools, Materials, and Terminology	LO2	Employ a range of appropriate industry terminology when collaborating with other allied trades.		√			✓		✓								
	LO3	Select appropriate tools and materials to complete assigned tasks in selected allied trade project environments.			✓			✓	✓								
CARP3502	Aim	The aim of this course is to develop the knowledge, skills, and attributes to carry out assigned tasks in allied trades project work.															
Allied Trades Projects	LO1	Collaborate with other trades in the execution of assigned tasks for selected allied trades projects.	✓	√	✓	✓	✓	✓	✓								
•	LO2	Apply compliance and quality requirements to assigned project work for allied trades.	√				✓	✓	✓								

Timetable

This is a half-year programme, taught over 4 days at the 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 in a strand 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:

- 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	S
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

<u>Assessment</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.	1,2

Successful completion of course

Assessment in this course supports both achievement and competency-based assessment.

Competency-based course completion:

- Ākonga must successfully complete all specified assessment items to pass this course.

Resources

A list of recommended resources is provided in the course outline.

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to identify and use tools, materials and terminology employed to complete a range of familiar tasks in allied trades project work.

Ngā H	lua o te Ako Learning Outcomes	Ngā Tūtohu o te Kiko Indicative Content
Upon	the successful completion of this course, āk	onga will be able to
LO1	Explain legislation relevant to specific tasks in the construction trades industry. [GPO 1]	 Health and Safety 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

Content

CORE CONSTRUCTION AND COMMUNICATION SKILLS					
Course code	CARP3002	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

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

Assessment in this course supports both achievement and competency-based assessment.

Competency-based course completion:

- Ākonga must successfully complete all specified assessment items to pass this course.

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	nga 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

ALLIED TRADES TOOLS, MATERIALS, AND TEMINOLOGY					
Course code	CARP3501	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 Blended		Total lea	arning hours	150

Content

Introductory knowledge and skills relevant to:

Terminology and roles:

- Basic and relevant terminology as appropriate for the allied trades
- Identify job roles within the allied trades sector
- The inter-relationship between the allied trades
- Consenting, quality and other compliance requirements:
- The use and description of relevant materials

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

Resources

A list of recommended resources is provided in the course outline

Successful completion of course

Assessment in this course supports both achievement and competency-based assessment.

Competency-based course completion:

- Ākonga must successfully complete all specified assessment items to pass this course.

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to identify and use tools, materials and terminology employed to complete a range of familiar tasks in allied trades project work.

Ngā H	ua o te Ako Learning Outcomes	Ngā Tūtohu o te Kiko Indicative Content				
Upon	Upon the successful completion of this course, ākonga will be able to					
LO1	Identify and correctly use common hand tools and materials used in an allied trade. [GPO 1, 6, 7]	 Safe use and maintenance of basic and relevant hand tools Use and description of relevant materials 				
LO2	Employ a range of appropriate industry terminology when collaborating with other allied trades. [GPO 2, 5, 7]	 Basic and relevant terminology as appropriate for the allied trades Identify job roles within the allied trades sector Work practices among the trades Legislative requirements for specific allied trades 				
LO3	Select appropriate tools and materials to complete assigned tasks in selected allied trade project environments. [GPO 3, 6, 7]	 Preparing for construction-related project work Interpreting project requirements Selecting appropriate tools Selecting appropriate materials for selected applications Identifying compliance requirements 				

ALLIED TRADES PROJECTS						
Course code	CARP3502	Level	3	Credits	15	
Pre-requisites	Nil	Co-requisites		Nil		
Main programme	New Zealand Certificate in Construction Trade Skills (Level 3)	Strand Allied Trades		S		
Delivery modes	Provider-based Blended	Total learning hours 150				

Content

Introductory knowledge and skills relevant to:

Hand tools

- Safe use and maintenance of basic and relevant hand tools
- The use and description of relevant materials

Manufacture and assembly of construction trades items

- Manufacturing techniques
- Assembly techniques

Selection of appropriate materials

- Properties of materials
- Appropriateness for selected applications

Application of coatings and finishes

- Properties of selected coatings and finishes
- Application techniques

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

Resources

A list of recommended resources is provided in the course outline

Successful completion of course

Assessment in this course supports both achievement and competency-based assessment. Competency-based course completion:

- Ākonga must successfully complete all specified assessment items to pass this course.

Whāinga/He Tauākī Akoranga | Aim/Outcome Statement

The aim of this course is to develop the knowledge, skills, and attributes to carry out assigned tasks in allied trades project work.

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	Collaborate with other trades in the execution of assigned tasks for selected allied trades projects. [GPO 1, 2, 3, 4, 5, 6, 7]	 Executing assigned project work Participating in a collaborative team Safe use tools and materials The inter-relationship between the allied trades 		

		 Communicating with diverse range of construction workers Listening and following instruction
LO2	Apply compliance and quality requirements to assigned project work for allied trades. [GPO 1, 5, 6, 7]	 Identifying and applying compliance requirements to assigned project work Workplace safety