School of Construction and Engineering Trades

NZ2738

New Zealand Certificate in Carpentry (Level 4)

Student Handbook

NZ Certificate in Carpentry (Level 4)

Available on the Programme site on Moodle

This document is correct at time of publishing – February 2025

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School Welcome

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 Student Guide 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 Student Guide is available in a downloadable version on Moodle and the website and in a printed copy at the School Administration office.

Programme Staff

Fasio Saolele (Programme Manager)

Tutors

Dan Desmond
Viliamu Lafaele
Matthew McCullough
Rick Mawby
Tana Phillips
Leo Pirini
Hector Rurehe
Taratoa Pokotea

Arnold Lomax (Coordinator)

Resources

- A mobile device (phone, tablet, or iPad).
- A camera.
- A carpentry tool kit.
- Personal Protective Equipment (PPE).

We have other materials available, but we only supply them in relation to the topic. (These will be used for Year 4 ākonga.) Set rulers, Tarsus protractors, and pencils.

Entry requirements

10 credits at NCEA level 1 in each of numeracy and literacy, or equivalent study/work experience.

International: IELTS 5.5 (no band lower than 5.0), or equivalent

Applicants must:

- Be working in the construction industry as an apprentice or trainee.
- Be supervised by someone who is prepared to support the training.
- Enter into a training agreement between the apprentice, employer, and WelTec. The agreement will outline the responsibilities of each party to the apprenticeship and will align with the principles in the Code of Good Practice for New Zealand Apprenticeships.

Programme Aim

The aim of this programme is to provide the building and construction industry with trained people who have achieved the practical skills and knowledge required to work unsupervised, to construct, repair and install building structures to the level required of a commercially competent carpenter.

Graduate Outcomes

Graduates will be able to:

- Apply a broad practical working knowledge of the fundamentals required in the carpentry trade including tools and equipment, materials, t building regulations and compliance requirements, drawings and specifications, building types, methods of construction, building science, building mathematics, and communication.
- Plan and carry out all aspects of establishing and maintaining construction sites including preparatory demolition and set out for buildings.
- Plan and carry out all aspects of the construction of framed and solid foundations and retaining walls.
- Plan and carry out all aspects of construction to form the structural elements of buildings.
- Plan and carry out all aspects of construction of exterior wall cladding and joinery to achieve weather proofing requirements for buildings.
- Plan and carry out all aspects of insulation, linings, finishing trim, joinery, hardware and sound control systems.
- Self-manage on-going learning and support the learning of others with a responsibility to maintain the professional standards of the construction industry.
- Apply knowledge of roof cladding methodology and weather proofing compliance requirements for buildings.
- Operate competently and unsupervised to the required safety, technical, quality and productivity standards expected in a commercially viable construction environment.

Graduates of the Metal Roof Cladding Installation optional strand will also be able to:

- Carry out all aspects of metal roof cladding installation to achieve weather proofing compliance requirements for buildings.

Employment Pathways

Graduates of this qualification will be qualified carpenters and may apply for the Carpentry class of the Licensed Building Practitioner (LBP) scheme to become a Licensed Building Practitioner.

Programme Outline

Content

The programme of study is undertaken part time over four years. Each year consists of eight courses with a total of 28 10-credit courses and 2 15-credit courses making up the 310-credit programme.

Although courses are allocated into one of four years of study, a student may select appropriate courses from differing years so as to match the construction site work they foresee, in accordance with individual training plan negotiations between the employer, the apprentice and WelTec. Nonetheless, it is expected that a student will enrol in eight courses per year.

The content for each course is as follows:

YEAR ONE					
Courses	**Course Title**	**Level**	**Credit**	**Status**	**Pre / Co**
CS4101	Carpentry Introduction	4	10	C	N/A
CS4102	Carpentry Introduction 2	4	10	C	N/A
CS4103	Preliminaries 1	4	10	C	N/A
CS4104	Preliminaries 2	4	10	C	N/A
CS4105	Interiors 1	4	10	C	N/A
CS4106	Exterior Structures 1	4	10	C	N/A
CS4107	Walls and Roofs 1	4	10	C	N/A
CS4108	Joinery 1	4	10	C	N/A
		TOTAL	**80**		

YEAR TWO					
Courses	**Course Title**	**Level**	**Credit**	**Status**	**Pre / Co**
CS4109	Exterior Structures	4	10	C	N/A
CS4110	Walls 1	4	10	C	N/A
CS4133	Exterior Envelope 1	4	15	C	N/A
CS4112	Support Structures 1	4	10	C	N/A

YEAR TWO					
Courses	**Course Title**	**Level**	**Credit**	**Status**	**Pre / Co**
CS4114	Exterior Envelope 2	4	10	C	N/A
CS4116	Exterior Structures	4	10	C	N/A
CS4128	Interiors 3	4	10	C	N/A
		TOTAL	**75**		

YEAR THREE					
Course	**Course Title**	**Level**	**Credit**	**Status**	**Pre / Co**
CS4117	Exterior Structures 4	4	10	C	N/A
CS4118	Support Structures 4	4	10	C	N/A
CS4119	Concrete Structures 4	4	10	C	N/A
CS4120	Interior 2	4	10	C	N/A
CS4121	Exterior Envelope 3	4	10	C	N/A
CS4122	Exterior Envelope 4	4	10	C	N/A
CS4123	Roofs 1	4	10	C	N/A
CS4124	Roofs 2	4	10	C	N/A
		TOTAL	**80**		

YEAR FOUR					
Courses	**Course Title**	**Level**	**Credit**	**Status**	**Pre / Co**
CS4125	Preliminaries 3	4	10	C	N/A
CS4126	Preliminaries 4	4	10	C	N/A
CS4113	Support Structures 2	4	10	C	N/A
CS4115	Support Structures 3	4	10	C	N/A
CS4129	Alterations and Additions 4	4	10	C	N/A
CS4130	Preliminaries 5	4	10	C	N/A
CS4134	Capstone	4	15	C	N/A
		TOTAL	**75**		

Content

Content includes Carpentry, preliminaries, interiors, walls and roofs, joinery, exterior structures, envelope, support structures, exterior envelope

Carpentry Introduction 1

Students will learn about tools and equipment of the trade; materials, legislation, consent and licensing, building types and methods, about building hardware.

Carpentry Introduction 2

Students will learn about building mathematics, planning and communication, site establishment and maintenance, and site set-out.

Preliminaries 1

Students will learn about building mathematics, planning and communication, site establishment and maintenance, and site set-out.

Preliminaries 2

Students will carry out building calculations with measurements taken, work effectively and communicate, establish and maintain sites, and set-out sites.

Interiors 1

Students will learn about thermal insulation, linings and finishing trim, and building calculations.

Exterior Structures 1

Students will fix and brace wall frames, and fix roof support members.

Walls and Roofs 1

Students will learn about wall and roof structures, and ceiling framing, and understand building calculations.

Joinery 1

In this course students will develop an understanding of the principles used to manage weathertightness issues, and how cavities are prepared for and integrated with joinery and claddings. They will also identify interior doors and stairs, know how to install them, and know how to do interior set-outs.

Exterior Structures 2

Students will learn about framed floors, post and portal construction, and building science.

Walls 1

Students will construct walls.

Exterior Envelope 1

Students will apply building mathematics and learn about wall cladding.

Support Structures 1

Students will learn about framed floors, concrete floors, and retaining walls.

Support Structures 2

Students will construct timber framed foundations and sub- floors.

Exterior Envelope 2

Students will learn about roof claddings.

Support Structures 3

Students will construct retaining walls, and work within code and compliance processes.

Exterior Structures 3

Students will learn about joinery, hardware, and materials.

Exterior Structures 4

Students construct decks, and stairs or ramps, and comply with consent and code requirements.

Support Structures 4

Students construct concrete floors. Students will construct concrete floors

Concrete Structures

Students will learn about materials, building types and methods, columns, posts, beams and portals and concrete floors.

Interiors 2

Students learn about materials, building types and methods, columns, posts, beams and portals and concrete floors.

Exterior Envelope 3

Students install wall claddings.

Exterior Envelope 4

Students prepare and install cavity systems, and complete opening for joinery.

Roofs 1

Students construct roofs, support framing, penetrations, and finishing trim.

Roofs 2

Students learn about building mathematics, walls, roofs, and ceilings.

Preliminaries 3
Students learn about site establishment and maintenance, drawings and specifications, and planning and communication.

Preliminaries 4
Students learn about legislation, consents, and licensing, and building science.

Interiors 3
In this course students will install finishing trim, joinery, and hardware.

Alterations and Additions
Students disestablish sites, plan, and undertake demolition, and form penetrations in ceilings, and framed floors.

Preliminaries 5
Students apply knowledge of legislation, consents and licensing, drawings and specifications and site establishment and maintenance.

Capstone
Students will self-manage on-going learning and support the learning of others with a responsibility to maintain the professional standards of the construction industry.

Timetable

This programme is taught via block courses and part-time study with evening classes which are 1 night a week which will confirmed to you when you enrol

Progress through programme

This programme is completed in four years of study, part time . Students must complete all requirements within a maximum of seven years to be awarded the qualification.

Transition arrangements

The last date of assessment to take place for version 1 of this qualification is 31 December 2026. Ākonga currently enrolled in version 1 of this qualification may either complete the requirements by 31 December 2026 or transfer to version 2. Transition will be managed on a case-by-case basis.

Award of Qualification

Students must successfully complete all 32 courses of the programme to be awarded the *New Zealand Certificate in Carpentry NZ2738.*

These courses require the student to apply and demonstrate skills and knowledge consistently at prescribed industry levels of proficiency and is able to demonstrate their competency in meeting the Graduate Outcomes of the qualification.

Courses	Course Title	Level	Credit	Status
CS4101	Carpentry Introduction	4	10	C
CS4102	Carpentry Introduction 2	4	10	C
CS4103	Preliminaries 1	4	10	C
CS4104	Preliminaries 2	4	10	C
CS4105	Interiors 1	4	10	C
CS4106	Exterior Structures 1	4	10	C
CS4107	Walls and Roofs 1	4	10	C
CS4108	Joinery 1	4	10	C
CS4109	Exterior Structures	4	10	C
CS4110	Walls 1	4	10	C
CS4133	Exterior Envelope 1	4	15	C
CS4112	Support Structures 1	4	10	C
CS4114	Exterior Envelope 2	4	10	C
CS4116	Exterior Structures	4	10	C
CS4128	Interiors 3	4	10	C
CS4117	Exterior Structures 4	4	10	C
CS4118	Support Structures 4	4	10	C
CS4119	Concrete Structures 4	4	10	C
CS4120	Interior 2	4	10	C
CS4121	Exterior Envelope 3	4	10	C
CS4122	Exterior Envelope 4	4	10	C
CS4123	Roofs 1	4	10	C
CS4124	Roofs 2	4	10	C
CS4125	Preliminaries 3	4	10	C
CS4126	Preliminaries 4	4	10	C
CS4113	Support Structures 2	4	10	C
CS4115	Support Structures 3	4	10	C
CS4129	Alterations and Additions 4	4	10	C
CS4130	Preliminaries 5	4	10	C
CS4134	Capstone	4	15	C

Teaching and Learning Methods

This programme is taught on both WelTec campuses and industry worksites.

Tutorials, practical demonstration, simulated work-based learning, group work, project activities, online learning activities, reflective learning activities, guest speakers, field trips, work experience

Assessment

To pass each course, students must be competent on all assessments.

Competency standards will be established based on time, error rate and levels of supervision within the contexts of the course learning outcomes.

Aegrotat

is not available for this programme.

Further assessment

Further assessment is conducted within the Academic Statute – section 4 Regulations. This programme limits further attempts to up to two (2) attempts per assessment.

Assessment in Te Reo Māori

Students may request to have summative assessments conducted in Te Reo Māori. As provided for in the Academic Statute 4.5.

Practical and Work Based Components

This programme is predominantly based in the workplace therefore there are many practical and work based components. Students will also attend off job training sessions on campus.

Personal Responsibility

We are committed to providing a safe and positive learning and working environments 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 click here

Course Outlines

Code	Title
CS4101	Carpentry Introduction 1
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about tools and equipment of the trade; materials, legislation, consent and licensing, building types and methods, about building hardware. The course content covers aspects of Fundamentals Skill Set 1, 2 3, 4 and 5 and Interior Linings and Finishing Skill Set 5 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course the student will be able to:

1. Identify safe use and maintenance of carpentry hand tools, power tools, and equipment.
2. Identify features of timber and other metals used in the construction industry, including joining methods, applications & finishes.
3. Identify health and safety legislation frameworks and consent and licensing requirements within the construction industry.
4. Identify the principles, features and construction methods of light timber and steel framed buildings.
5. Identify the different types and properties of interior doors and stairs, and how to prepare for and install interior joinery.

Content

- Tools and equipment
  - Tools and equipment used on a daily basis by carpenters
- Materials
  - Materials knowledge required is that of an industry practitioner rather than that of an expert.
  - Timber. Other materials.
- Legislation, consent and licensing
  - Health and safety legislative framework in the construction industry
  - Site Safe Construction passport
- Construction methods
  - The level of knowledge required is that of an industry practitioner.
  - Typical methodologies using light timber, steel framing
- Interior joinery
  - Includes doors, stairs and cabinets

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO 1-5

Successful completion of course

Students must successfully complete all assessment activities within the portfolio to pass this course.

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

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

Code	Title
CS4102	Carpentry Introduction 2
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will use tools and equipment of the trade and apply health and safety legislation. The course content covers aspects of Fundamentals Skill Set 1 and 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course the student will be able to:

1. Select, safely use, and maintain hand tools, power tools and equipment appropriate to identified carpentry tasks.
2. Practically apply the health and safety legislative framework in everyday contexts within construction operations

Content

- Tools and equipment
  - Tools and equipment used on a daily basis by carpenters
- Legislation
  - Health & Safety legislation as it applies to individuals & organisations
  - In the context of everyday activities in the construction process

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO 1-2

Successful completion of course

Students must successfully complete all assessment activities within the portfolio to pass this course.

Resources

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

Code	Title
CS4103	Preliminaries 1
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about building mathematics, planning and communication, site establishment and maintenance, and site set-out. The course content covers aspects of the Fundamentals Skill Sets 2, 8 and 9, and parts of the Preliminary Skill Set 1 and 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course the student will be able to:

1. Identify units of measurement and conventions relating to centres and spacings, area and volume for building calculations.
2. Identify the roles and responsibilities of all contributing parties to the construction process.
3. Identify sites, satisfy the requirements of building consent authorities and clients, and identify facilities required to start and progress through the build.
4. Read and interpret information, use levelling equipment, and set up building profiles.
5. Describe the different types, applications and finishes of other metals used in the industry.

Content

- Building mathematics
  - Units of measurement, conventions for use with centres and spacings
  - Area and volume
  - Pythagoras' theorem and its practical application
- Planning and communication
  - Roles and responsibilities of the parties to a construction process
- Site establishment and maintenance
  - Level of complexity (for site establishment and maintenance is equivalent to that of a conventional, two storey dwelling)
- Site set-out
  - Set out complexity to include internal & external corners

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO 1-4

Successful completion of course

Students must successfully complete all assessment activities within the portfolio to pass this course.

Resources

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

Code	**Title**
CS4104	Preliminaries 2
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will carry out building calculations with measurements taken, work effectively and communicate, establish and maintain sites, and set-out sites. The course content covers aspects of Fundamentals Skill Set 8 and 9, and parts of the Preliminary Work Skill Set 1 and 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course the student will be able to:

1. Take measurements, carry out calculations, use principles of right-angled triangles.
2. Work and communicate effectively throughout the construction process.
3. Identify the site and position of the building and any features to then set up and/or organise the necessary site facilities.
4. Set out buildings, construct profiles and establish set-out points.

Content

- Calculations
  - Measurements and calculations in one, two and three dimensions
  - Principles of right-angled triangles: check for square, calculate lengths and pitches
- Communication
  - Work effectively with parties to a construction process
  - Involves everyday contact on site and the ability to discuss and reach conclusions about work requirements and integration of activities
  - Involves written, oral and graphic communications
- Site establishment and maintenance
  - Site identification to include the site itself, boundaries, building position, & any plants, or physical attributes requiring specific consideration
- Set out and building profiles
  - Level of complexity of the set-out must meet or exceed that required to form both internal and external corners on the exterior of the building.

Assessments

Assessment Method	**Weighting**	**Learning Outcome/s**
Portfolio	100%	LO1-4

Successful completion of course

Students must successfully complete all assessment activities within the portfolio to pass this course.

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

Code	**Title**
CS4105	Interiors 1
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about thermal insulation, linings and finishing trim, and building calculations. The course content covers aspects of Interior Linings and Finishing Skill Set 1, 2 and 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course the student will be able to:

1. Identify the properties and performance of thermal insulation, and how to carry out the installation process.
2. Identify types of sheet linings, and framing and installation requirements for linings.
3. Identify types of finishing trim and know how to install finishing trim.
4. Calculate area and volume, and use percentages and ratios in building calculations

Content

- Thermal Insulation
  - R values for floors, ceilings & walls
  - how thermal insulations works
- Interior Linings
  - types of linings, composition of linings, and how they relate to other building elements
  - framing requirements as per for both timber & steel framing, and proprietary systems
  - installation requirements as per manufacturer's requirements & consented plans
- Finishing trim
  - trim may complete perimeters, openings, cabinetry and stairs
  - Installing finishing trim includes dealing with internal and external corners, non 90° angles, junctions, joins and stops
- Calculations
  - general concepts of area and volume
  - applied in context of interior linings and trim

Assessments

Assessment Method	**Weighting**	**Learning Outcome/s**
Portfolio	100%	LO 1-4

Successful completion of course

Students must successfully complete all assessment activities within the portfolio to pass this course.

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

Code	**Title**
CS4106	Exterior Structures 1
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will fix and brace wall frames, and fix roof support members. The course content covers aspects of Frame and Structure Skill Set 1 and 2 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course the student will be able to:

1. Fix, brace and connect wall frames to floors and roofs.
2. Fix roofing support members to roof framing.

Content

- Fix, brace and connect Walls
  - Permanently fix together and brace wall frames and connect them to floor framing or flooring and roof framing
- Fix roofing support members
  - Roofing support members include purlins, battens and sarking or other substrates

Assessments

Assessment Method	**Weighting**	**Learning Outcome/s**
Portfolio	100%	LO 1-4

Successful completion of course

Students must successfully complete all assessment activities within the portfolio to pass this course.

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

Code	Title
CS4107	Walls and Roofs 1
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about wall and roof structures, and ceiling framing, and understand building calculations. The course content covers aspects of Frame and Structures Skill Set 1, 2 and 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Identify configuration and components of walls, how walls are constructed and permanently fixed together, and key aspects of non-load bearing framing.
2. Identify types of ceiling framing and components.
3. Describe how to calculate area and volume, and how to use and apply percentages and ratios to building calculations.

Content

- Wall Framing
  - types and configurations of walls: timber, formed light gauge steel channel
  - Construction process: in situ framing, working with prefabricated frames
  - Non load-bearing includes interior partitioning, but on its own does not meet the learning outcome/s for this course
- Ceiling Framing
  - How to frame around penetrations
  - Types - sloping, flat, vaulted
  - Timber or formed light gauge steel channel
- Building Calculations
  - general concepts of area and volume
  - applied in context of wall and ceiling framing

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-3

Successful completion of course

Students must successfully complete all assessment activities within the portfolio to pass this course.

Resources

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

Code	Title
CS4108	Walls and Roofs 1
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will develop an understanding of the principles used to manage weathertightness issues, and how cavities are prepared for and integrated with joinery and claddings. They will also identify interior doors and stairs, know how to install them, and know how to do interior set-outs. The course content covers aspects of Fundamentals Skill Set 7, Exterior Envelope Skill Set 2, Interior Lining and Finishing Skill Set 4, and Preliminary Work Skill Set 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Describe the principles and methods to manage weathertightness.
2. Identify types of interior doors and stairs, interior stairs components, and know how to install interior joinery.
3. Explain how to undertake an interior set-out.

Content

- Weathertightness
  - Water penetration principles: capillary action, hydrostatic pressure, gravity, wind pressure and surface tension
  - Methods used to manage weathertightness: deflection, drying, drainage and durability of materials
  - How to prepare cavities for installation of joinery, integrate joinery with cladding
- Installing Joinery
  - As per Window association guidelines, manufacturer requirements
  - Matching with cladding-specific requirements
- Interior Joinery
  - Door types - single and double doors, standard and cavity sliders
  - Door Properties - hollow core, sound, fire, finishes
- Interior set out
  - For ceilings, walls, intermediate floors
  - Methods - grid lines, transfers

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO 1-3

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4109	Exterior Structures 2
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about framed floors, post and portal construction, and building science. The course content covers aspects of Fundamentals Skill Set 2 and 7, Support Structures Skill Set 1, and Frames and Structures Skill Set 1 and 4 of the New Zealand Certificate in Carpentry specifications.

Learning outcomes

By the end of this course students will be able to:

1. Identify requirements and components for constructing decks, stairs and ramps.
2. Explain how to install posts, beams and portal frames, and methods of joining steel, and identify methods of joining steel.
3. Identify non load-bearing framing, the purpose of supplementary framing, and repair and maintenance framing work.
4. Describe the impact of subterranean conditions, and principles of energy efficiency and sound transmission.

Content

- Framed Floors
  - Constructed from timber, or formed light gauge steel channel
- Columns, posts, beams and portals
  - Reinforcing and concrete is covered under the concrete floor's skill set in the support structure specification.
  - Joining steel includes welding, and connectors
- Non load-bearing framing
  - Interior partitioning (non-load-bearing constructed from timber or steel stud) does not on its own meet the requirements for this wall framing skill set
  - Requirements of non-load-bearing framing
  - Purpose of supplementary framing,
  - Repair and maintenance framing work
- Building Science
  - Sub-strata, soil composition and compaction, proximity of water table, potential for earthquake and geothermal activity
  - Energy efficiency principles include design, building placement, heat transfer, thermal mass and insulation
  - The level of building science knowledge required is that of an industry practitioner rather than that of an engineer, designer or scientist

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-4

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

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

Code	**Title**
CS4110	Walls 1
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will construct walls. The course content covers aspects of Frame and Structures Skill Set 1 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Set out and construct wall frames.

Content

- Wall Framing
  - Timber or formed light gauge steel channel
  - Set out and construct wall frames from individual components, and erect and fix together prefabricated wall frames

Assessments

Assessment Method	**Weighting**	**Learning Outcome/s**
Portfolio	100%	LO1

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4133	Exterior Envelope 1
Level	**Credits**
4	15
Learning hours	Total:150 (30 tutor-directed, 90 work experience, 30 self-directed)

Aim

In this course students will apply building mathematics and learn about wall cladding and exterior joinery. The course content covers aspects of Fundamentals Skill Set 8, and Exterior Envelope Skill Set 2 and 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Calculate physical quantities of materials
2. Identify how to fix sheet and lineal board claddings, consider claddings at corners and penetrations, joins in, as well as considering how to integrate cladding materials
3. Identify types, properties, components and terminology of joinery
   4 Identify4Identify types and properties of sheet and lineal board claddings and know the requirements for installation of underlay and cavity systems.

Content

- Calculations
  - Quantities of claddings, , fixings, accessories, underlays, flashings
- Joinery
  - Applying understanding of weathertightness principles in context of joinery
- Claddings
  - principles of systems as applied to linear and sheet claddings
  - examples of how they apply in context of systems, and manufacturers requirement
  - Fixing per manufacturer requirements

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-4

Successful completion of course

Students must successfully complete all assessment activities to pass this course.
Resources A list of recommended resources is provided in the course outline.

Code	Title
CS4112	Support Structures 1

Level	Credits
4	10

Learning hours Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about framed floors, concrete floors, and retaining walls. The course content covers Support Structures Skill Sets 1, 2 and 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Identify pile and pole construction requirements
2. Identify types, materials and methods used to construct concrete foundations and slabs
3. Identify principles of retaining wall design, and types and construction methods used to create retaining walls

Content

- Piles and Poles
  - Supporting interior floor framing and timber decks
  - Pole structures can be frame or platform
  - Floor frames can be fixed to bearers on piles or to wall frames at first or subsequent floor levels
  - Flooring includes sheet materials and lineal products; flooring can be (diaphragm) bracing
  - Installation, how sub-floor structures are fixed
  - Properties and application of types of flooring.
- Concrete Floors
  - Foundations include concrete and concrete block; thickened edge slab, integrated slab but not proprietary suspended concrete floor systems
  - Construct formwork, place damp proof membrane, cut, bend and tie reinforcing, place and finish concrete.
- Retaining walls
  - Principles include loads, and dealing with water

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-3

Successful completion of course

Students must successfully complete all assessment activities to pass this course.
Resources A list of recommended resources is provided in the course outline.

Code	Title
CS4114	Exterior Envelope 2
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about roof claddings, joinery and wall claddings. The course content covers aspects of the Exterior Envelope Skill Set 1of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Identify types and properties of roof claddings, framing and underlay for roof claddings installed by subcontractors
2. Identify types and properties of long-run roofing; requirements for framing, underlay, fixing

Content

- Roof Claddings
    - Roof claddings installed by subcontractors include concrete, clay, metal tiles; sheet, liquid, torch-on membranes; timber, slate, asphalt shingles
    - Long-run roofing includes metal and translucent roofing materials
    - Identify how to install long-run roofing, skylights, and spouting, and know how to integrate new roof cladding with existing.
    - The level of complexity for roof claddings must meet or exceed that required to form gables, hips and valleys

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1, 2

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4116	Exterior Structures 3
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will learn about joinery, hardware, and materials. The course content covers aspects of the Interior Linings and Finishing Skill Set 4 and 5 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Stand up, plumb, straighten and temporarily brace wall frames
2. Install joinery

Content

- Stand up and brace walls
  - Wall frames can be constructed out of either timber or formed light gauge steel channel
- Install joinery
  - Joinery is exterior joinery, and must integrate with claddings

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1,2

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4128	Interiors 3
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will install finishing trim, joinery, and hardware. The course content covers aspects of the Interior Linings and Finishing Skill Set 3, 4, and 5 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Install finishing trim
2. Install interior joinery
3. Install hardware

Content

- Finishing Trim
  - skirtings, architraves, scotia, and other mouldings
  - may complete perimeters, openings, cabinetry and stairs
  - dealing with internal and external corners, non 90˚ angles, junctions, joins and stops
- Interior Joinery
  - doors, stairs, cabinets
- Install Hardware
  - Hardware for interior situations

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-3

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4117	Exterior Structures 4
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will construct decks, and stairs or ramps, and comply with consent and code requirements. The course content covers aspects of the Fundamentals Skill Set 4, Preliminary Work Skill Set 1, Support Structures Skill Sets 1 and 3, and Frames and Structures Skill Set 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Construct timber decks and exterior stairs or ramps
2. Erect, alter, inspect and dismantle non-notifiable scaffolding
3. Disestablish the site and ensure site is tidy when complete, and coordinate deliveries and maintain a workable site
4. Form penetrations in ceiling framing

Content

- Timber decks
  - Timber stairs are exterior stairs
  - Piles and poles support both interior floor framing and timber decks
- Scaffolding
  - Scaffolding processes and safety
- Site coordination
  - Level of complexity for site establishment and maintenance is equivalent of a conventional, two storey dwelling
- Ceiling Framing
  - Ceiling framing can be constructed out of either timber or formed light gauge metal

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-4

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4118	Support Structures 4
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will construct concrete floors. The course content covers the Support Structures Skill Set 2 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Set out, excavate, construct formwork and apply damp-proof membrane for concrete foundations and slabs
2. Cut, bend and tie reinforcing
3. Place and finish concrete

Content

- Concrete Foundations
  - Foundations include concrete and concrete block
  - Formwork includes stud and sheathing, shutters and proprietary systems
- Reinforcing
  - cut &/or bend mesh, starters, barstie mesh, starters, bars, links
- Placing concrete
  - from barrow, chute, pump
  - finishes includes broom, trowel, edging to that which a carpenter would typically do

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-3

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4119	Concrete Structures
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about materials, building types and methods, columns, posts, beams and portals and concrete floors. The course content covers aspects of the Fundamentals Skill Set 2 and 5, the Frames and Structures Skill Set 4 and Support Structures Skills Set 2 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Describe principles, features and construction methods of concrete and heavy steel buildings, and buildings made from proprietary systems
2. Identify the fundamentals of concrete material and buildings used in the industry
3. Outline concrete use in relation to in-situ walls and other structures
4. Describe suspended concrete floors in relation to support structures. Refer to the New Zealand Certificate in Carpentry Specifications document for guidance on Skill Set content.

Content

- Building methods
  - The level of materials knowledge required is that of an industry practitioner rather than that of an expert with specialist knowledge
  - Proprietary systems include manufactured design solutions for specific building components that form a complete system, both prefabricated and site-assembled
- Materials
  - The level of knowledge required for materials other than timber is proportional to their use in the industry, and in specific contexts
- Walls and structures
  - Reinforcing and concrete is covered under the concrete floors skill set in the support structure specification
  - Erecting precast concrete walls, precast concrete columns and beams and other prebuilt panels Suspended concrete floors
  - The different types, purposes, materials and construction methods of suspended concrete floors

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-4

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4120	Interiors 2
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will learn about materials, building types and methods, columns, posts, beams and portals and concrete floors. The course content covers aspects of the Frames and Structures Skill Sets 2 and 3, and Interior Lining and Finishing Skills Set 2 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Fix ceiling framing from individual components and/or proprietary systems
2. Permanently tie together, brace and connect roof framing to wall framing
3. Install wall and ceiling linings

Content

- Ceiling Framing
  - Ceiling framing can be constructed out of either timber or formed light gauge metal
- Tying Roof Framing
  - Roof framing includes prefabricated components and individual components
- Wall and Ceiling linings
  - Linings include wall and ceiling sheet linings
  - Sheet linings include those requiring additional work by finishing trades once fixed and pre- finished sheet linings

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-3

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4121	Exterior Envelope 3
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will install wall claddings. The course content covers aspects of the Exterior Envelope Skill Set 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Install sheet and lineal board cladding
2. Install flashings and trim for claddings

Content

- Claddings
    - Installing claddings includes
        - Dealing with internal and external corners, junctions, joins and penetrations
        - Flashing and trims

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1,2

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4122	Envelope 4
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will prepare and install cavity systems and complete opening for joinery. The course content covers aspects of the Exterior Envelope Skill Set 1, 2 and 3 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Prepare cavities for the installation of joinery
2. Complete flashings, seals and trim around joinery
3. Install underlay and cavity systems

Content

- Cavity preparation, installation
- Installing claddings includes dealing with internal and external corners, junctions, joins and penetration

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-3

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4123	Roofs 1
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will construct roofs, support framing, penetrations, and finishing trim. The course content covers aspects of the Frame and Structures Skill Set 2 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Erect and form roof framing from prefabricated and individual components
2. Construct roof finishing components

Content

- Roof Framing
  - Roof framing: timber or formed light gauge steel channel
  - Roof framing includes prefabricated components and individual components
  - The level of complexity for roof framing must meet or exceed that required to form gables, hips and valleys
  - Roof finishing components include all members associated with the formation of eaves, verges, overhangs and fascias

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1,2

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4124	Roofs 2
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about building mathematics, walls, roofs, and ceilings. The course content covers aspects of the Fundamentals Skill Set 8 and Frame and Structures Skill Set 2 and 3 of the New Zealand Certificate in Carpentry Specifications. Students will identify and take up opportunities for ongoing development of carpentry knowledge and skills, establish and sustain supervision systems and consistently demonstrate appropriate levels of commercial competence when undertaking carpentry tasks.

Learning outcomes

By the end of this course students will be able to:

1. Explain the use of trigonometric calculations to determine lengths and pitches
2. Identify how to frame around penetrations and construct roof finishing components
3. Explain how ceiling framing is constructed and assembled, and how to frame around penetrations
4. Identify how roof framing is constructed and permanently tied together, braced and connected to wall framing.

Content

- Calculations
  - develop understanding of general principles, practices
  - apply in context of roof and ceiling framing
- Roof penetrations and finishing
  - Roof finishing components include all members associated with the formation of eaves, verges, overhangs and fascias
- Ceiling framing
  - can be constructed out of timber or formed light gauge metal

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-4

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4125	Preliminaries 3
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about site establishment and maintenance, drawings and specifications, and planning and communication. The course content covers aspects of the Fundamentals Skill Set 6 and 9, the Preliminary Work Skill Set 1 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Outline site establishment and maintenance requirements, and how to plan, programme and coordinate, and know access and delivery requirements
2. Apply knowledge of drawings and specifications in a construction context
3. Outline planning and communication processes in a construction context
4. Explain sound control systems, ratings, and how to install sound control system
5. Identify the environmental and building legislative framework as it applies to the construction industry

Content

- Site establishment, drawings and specifications
  - Level of complexity is of a conventional, two storey dwelling.
- Planning and communication
  - Communicating effectively involves written, oral and graphic communications
- Sound Control
  - Achieved through a combination of products to meet specifications of a system
- Legislation
  - The level of legislative knowledge required is that of an industry practitioner rather than that of an expert with specialist knowledge

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-5

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4126	Preliminaries 4
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 60 work experience, 20 self-directed)

Aim

In this course students will learn about legislation, consents and licensing, and building science. The course content covers aspects of the Fundamentals Skill Set 3, 4, 5 and 7 of the New Zealand Certificate in Carpentry Specifications. Students will identify and take up opportunities for ongoing development of carpentry knowledge and skills, establish and sustain supervision systems and consistently demonstrate appropriate levels of commercial competence when undertaking carpentry tasks.

Learning outcomes

By the end of this course students will be able to:

1. Apply knowledge of the consents and licensing process and responsibilities in the New Zealand construction industry
2. Analyse materials relation to building science, and the principles, features and construction methods of buildings made from natural and synthetic materials
3. Outline the fundamentals of equipment used by the carpentry trade
4. Explain how loads work on, and are compensated for within a structure
5. Identify the key components and implementation of a demolition plan

Content

- Consents and licensing
  - It is not a requirement to be a licensed building practitioner but it is required that work completed meets legislated requirements
  - Consenting processes relate to both national and local legislation and codes
- Materials
  - The level of building science knowledge required is that of an industry practitioner rather than that of an engineer, designer or scientist
- Equipment
  - The use and application of different items of access, lifting, and other equipment
- Building Science
  - Compensating for loads includes size and configuration of foundations and members, and types and configurations of fixings and bracing elements
- Demolition
  - How to support existing structures, isolate services, protect exposed areas from the elements

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-5

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4113	Support Structures 2
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will construct timber framed foundations and sub- floors. The course content covers aspects of Support Structures Skill Set 1 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Set out and place piles or poles in position
2. Construct sub-floor framing and bracing, install flooring materials

Content

- Framed Floors
  - can be constructed out of either timber or formed light gauge steel channel
  - can be fixed to bearers on piles or to wall frames at first or subsequent floor levels
  - Floor framing includes farming for openings/penetrations

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1,2

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4115	Support Structures 3
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will construct retaining walls, and work within code and compliance processes. The course content covers aspects of the Support Structures Skill Set 3, and the Fundamentals Skill Set 4 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Construct Retaining walls
2. Undertake building and construction work to be compliant with the applicable codes and consent processes.

Content

- Retaining Walls
  - materials, methods as typically used in construction of retaining walls
- Compliance
  - as per local authority and/or building code requirements

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1,2

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4129	Alterations and Additions
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will disestablish sites, plan and undertake demolition, and form penetrations in ceilings, and framed floors. The course content covers aspects of the Preliminary Work Skill Set 1 and 2, and Support Structures Skill Set 1 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Plan and undertake demolition work
2. Form penetrations in floor framing, install flooring materials

Content

- Demolition
    - Preparing existing buildings for construction activities including new work, repair, renovation or alteration. It does not require the complete demolition of buildings
- Form penetrations
    - Floor and ceiling framing can be constructed out of timber or formed light gauge steel channel

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1,2

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4130	Preliminaries 5
Level	**Credits**
4	10
Learning hours	Total:100 (20 tutor-directed, 70 work experience, 10 self-directed)

Aim

In this course students will apply knowledge of legislation, consents and licensing, drawings and specifications and site establishment and maintenance. They will also install sound control systems. The course content covers aspects of the Fundamentals Skill Sets 3, 6 and 8, Preliminary Work Skill Set 1, and Interior Lining, and Finishing Skills Set 1 and 6 of the New Zealand Certificate in Carpentry Specifications.

Learning outcomes

By the end of this course students will be able to:

1. Practically apply the environmental and building legislative frameworks in construction operations, while being compliant with the applicable codes and consent processes
2. Read, interpret, apply working drawings and specifications; calculate quantities of materials
3. Devise a work programme
4. Install sound control systems and thermal insulation

Content

- Legislation and compliance
  - Building Act 2004 and amendments
  - Health & Safety at Work Act 2015
  - LBP scheme
  - Conditions of Building Consent as issued by BCA
- Working Drawings & Specifications
  - Minimum level of complexity equivalent to that of a conventional, two storey dwelling
  - Interpret, apply conditions of consent as required in consented drawings, specifications
  - Quantities to be calculated is for specific components or building tasks rather than the list of materials for an entire building
- Work programme
  - At task and project level
  - Includes key milestones of time and/or progress through job
- Sound Control, Thermal Insulation
  - Can be achieved through installation of a combination of products to meet specifications of a system

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-4

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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

Code	Title
CS4134	Capstone
Level	**Credits**
4	15
Learning hours	Total:150 (30tutor-directed, 110work experience, 10 self-directed)

Aim

In this course students will self-manage on-going learning and support the learning of others with a responsibility to maintain the professional standards of the construction industry. They will also demonstrate the emerging ability to operate competently and unsupervised to the required safety, technical, quality and productivity standards expected in a commercially viable construction environment.

Learning outcomes

By the end of this course students will be able to:

1. Self-manage on-going learning with a responsibility to maintain the professional standards of the construction industry
2. Support the learning of others with a responsibility to maintain the professional standards of the construction industry
3. Operate competently and unsupervised to the required safety, technical, quality and productivity standards expected in a commercially viable construction environment

Content

- Self-management
  - Formal and informal opportunities to maintain and further develop skills, knowledge
  - Seeking advice on pathways for work, career development
- Supporting
  - How to coach/mentor others
  - Giving constructive feedback
  - Developing plans for development of those being supported
- Operating to standards
  - Done consistently to the required standard
  - Across all aspects of programme of study

Assessments

Assessment Method	Weighting	Learning Outcome/s
Portfolio	100%	LO1-3

Successful completion of course

Students must successfully complete all assessment activities to pass this course.

Resources

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