CRICOS: 00122A | RTO: 3046

RMIT UNIVERSITY

Built for What's next...

Explore Building and Trades at RMIT

2022

Vocational Building and Trades

RMIT offers accredited TAFE pre-apprenticeship and apprenticeship courses in electrical and instrumentation, plumbing and gas-fitting, carpentry, and refrigeration and air-conditioning.

Or study a Diploma of Building and Construction where you will plan, coordinate and manage a project from inception to delivery.

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Building and trades at a glance

What were the five most in-demand trades and jobs in 2021[2]?

Electricians

Employers are looking for HVAC Technicians with a trade qualification in air-conditioning and refrigeration

Plasterers

Employers are looking for experience in both residential and commercial projects, with skills from setting to sheeting

Plumbers

- Employers are looking for workers with a trade qualification and experience in the commercial and maintenance sectors.
- 6.3% projected job growth for this role in the next five years[5]

Residential Estimators

- Employers are looking for skills and experience in working for home builders.
- 8.6% projected job growth for this role in the next five years[3]

Site Mangers

- Employers are looking for skills and experience in working on projects in education, aged care and childcare.
- 12% projected job growth for this role in the next five years[4]

Levels of Study

Pre-apprenticeships and Certificate IIs

RMIT offers pre-apprenticeships, or Certificate II programs, that provide the knowledge and skills so you can step into industry or be prepared for an apprenticeship.

Pre-apprenticeships are a great introduction to the Trades, giving you a good idea of what your pprenticeship might look like.

You can also simply exit after a Certificate II and get started either in a trade or on your own projects.

RMIT offers pre-apprenticeships in:

- Electrotechnology
- Plumbing

Usually a Certiticate II:

- Is approximately three months long
- Covers the basic principles and skills in your preferred trade area
- Does not require you to have an employer before you start
- Can reduce the amount of study time required for an apprenticeship
- Is a mix of theory and practical

Many employers take on apprentices who have completed a pre-apprenticeship or Certificate II because:

- They have proven their interest in the trade
- They already know the basic principles of the trade
- They are familiar with most of the tools that the trade uses and many typical situations
- They have had the opportunity to receive occupational health and safety training and are likely to already have a Construction Induction Card (White Card)

Entrance requirements

You must be older than 16 years and an Australian or New Zealand citizen, or a permanent resident.

You'll be required to sit an entrance assessment to establish your English, mathematical and spatial-reasoning skills. This assessment will be conducted as part of the selection process.

Fees

Current fee information can be found at **rmit.edu.au/**programs/fees/vocational

How to apply

Pre-apprenticeship programs run throughout the year. You can apply directly through RMIT at any time by visiting **rmit.edu.au**/study-with-us/levels-of-study/apprenticeships-and-traineeships/preapprenticeships

Some pre-apprentice programs are free TAFE priority courses. Find out which programs and check your eligibility at **rmit.edu.au**/freetafe

Top tips for getting an apprenticeship

1. Do a pre-apprenticeship. You'll get a good idea of whether you like the trade and you gain skills that will put you ahead of the pack.

2. Genuine interest and engagement is recognised. RMIT receives many requests from employers looking for apprentices, and recommends only the best students

3. Have a CV with referees prepared and keep an eye on job listings. The more applications you send out, the more likely you are to gain an apprenticeship.

4. Contact peak industry organisations within your trade. They often keep a list of employers looking for apprentices.

5. Use services such as Australian Apprenticeship Support Network providers or contact group training organisations. They can put you in touch with prospective employers.

Apprenticeships

For many trades, you need to complete an apprenticeship to be recognised as a tradesperson. Apprenticeships are the main method for people in Australia to become skilled in a trade.

RMIT offers apprenticeships in:

- Electrotechnology
- Instrumentation and Control
- Plumbing
- Refrigeration and Air-conditioning
- Carpentry

An apprenticeship:

- Requires you to have found an employer before you start. In some cases this can be on a part-time basis, or you can be a school-based apprentice
- Takes between three and four years to complete
- Combines paid skilled work with accredited training
- Allows you to receive nationally recognised qualifications, usually at a Certificate III or Certificate IV level
- Provides you with the skills and training to work professionally in your field

Entrance requirements

- You must be 16 years or older and be employed on a full-time or part-time basis by an employer within your chosen trade.
- You must have a signed federal apprenticeship contract with the employer and be registered as an apprentice with an Australian Apprenticeship Support Network provider.

Fees

Current fee information can be found at **rmit.edu.au**/programs/fees/vocational

How do I apply for an apprenticeship?

Step 1 – Find an employer

You must be employed before you commence an apprenticeship.

Step 2 – Register with an AASN

Register with an **Australian Apprenticeship Support Network (AASN)**

Your AASN will work with your employer and preferred registered training organisation (RMIT) a to complete and process your application. Please note, this process can take up to two months.

How do I find an employer?

If you don't have an employer, but would like to study an apprenticeship there are two options:

- Contact the **Australian Apprenticeship Support Network Provider**
- Or book an appointment with **RMIT Skills and Job Agency**

Certificate IVs

Consider a Certificate IV if you want to continue studying to expand your qualifications, upskill or specialise. If your employer agrees, you can complete a Certificate IV* as an apprentice.

RMIT offers Certificate IVs in:

- Electrical Instrumentation*
- Instrumentation and Control*
- Plumbing and Services

Entrance requirements

It is recommended that you have a relevant Certificate III trade qualification or relevant industry experience.

Fees

Current fee information can be found at **rmit.edu.au**/programs/fees/vocational

Some Certificate IV programs are free TAFE priority courses. Find out which programs and check your eligibility at **rmit.edu.au**/freetafe.

How to apply

Apprentices must apply through their network provider.

Certificate IV in Instrumentation and Control applicants should apply via Direct application through the RMIT website.

Certificate IV Plumbing and Services applicants should apply by emailing vehs@rmit.edu.au

CI White Card

Induction (CI) White Card is legally required in order to work on a construction or building site in Victoria. By law, under Part 5.1 of the Victorian Occupational Health and Safety Regulations 2007, a person must successfully undertake construction induction training before working at a construction site in Victoria.

RMIT offers courses in:

- OHS legislative requirements
- Safe work practices
- Construction hazards and control measures
- OHS communication and reporting processes
- Role of designated OHS personnel
- Safety signs and symbols
- Relevant authorities for reporting hazards and incidents
- OHS incident response procedures
- Emergencies, PPE and Fire safety equipment

Entrance requirements

There are no minimum academic requirements. At this time, entry is only open to current and recent RMIT students.

Fees

The Victorian Government is offering free short accredited training courses to help people impacted by the COVID-19 pandemic re-skill and find work in the construction industry.

This free Construction Industry Skill Set is available to eligible applicants who wish to commence work in the construction industry.

Further fee information can be found at: **rmit.edu.au/**programs/s0142

How to apply

CI Whitecard is delivered as a single-day course. Classes run between 9am - 4pm on Thursdays. Additional days may become available.

All relevant course notes will be supplied with comprehensive instructions, exercises and assessments. Please bring photo ID and pen, paper and/or laptop for notetaking.

Enrolments will close one week prior to class, or when the class is full.

Apply for admission in your preferred month. You can then enrol into your preferred class date. Please only enrol in one class date.

Interest Areas and Programs

Electrotechnology and Refrigeration

Electricians

Electricians install, maintain, repair, test and commission electrical and electronic equipment and systems for industrial, commercial and domestic purposes. They also work on electrical transmission and distribution equipment.

Tradespeople in these fields can be employed as:

- Systems electricians working on residential and industrial buildings.
- Instrument technicians working on measuring, process control and scientific instruments Electronic tradespeople
- Providing electrical installation, repair maintenance, modification and testing of electrical/electronic systems

Instrument fitters select, install, maintain and commission instruments used to measure and control industrial processes such as pulp and paper manufacturing and petrochemical production. These types of instruments are used for controlling factors such as the flow of gases or liquids, temperature of materials, or pressure levels created during a process.

Refrigeration

Refrigeration mechanics assemble, install, service and repair industrial, commercial and domestic refrigeration and air-conditioning systems.

Refrigeration and air-conditioning tradespeople work in a range of sectors and locations:

- On shipping containers
- With trucks and transportation
- With industrial installations including supermarkets and bars
- Within air-conditioning firms doing domestic or industrial air-flow solutions

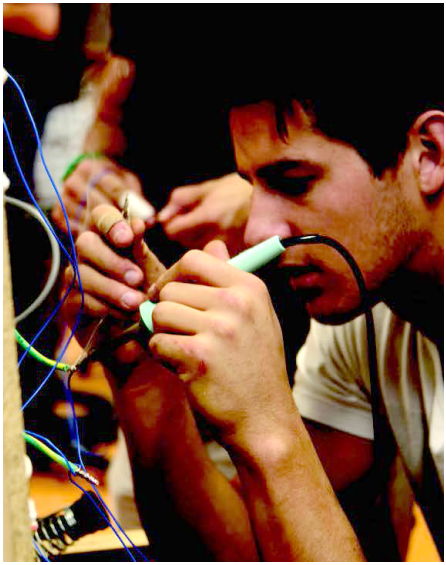
Certificate II in Electrotechnology

Pre-apprenticeship

	C2225
	Blended delivery (online and face-to-face)
	16 weeks full-time
NCC	**NCC** 22499VIC **rmit.edu.au**/programs/c2225

The electrotechnology pre-apprenticeship provides you with an introduction to two industries: electrical and refrigeration/ airconditioning. Taught full-time at RMIT, it mixes theory with the practical skills required across these industries.

The program allows you to develop a broad range of skills and knowledge to help you make informed decisions about your career path.
It leads to an apprenticeship as an electrician or an air-conditioning and refrigeration mechanic.



What you will study

You'll learn about extra-low voltage circuits, making utilities and components, solving electrotechnology problems and providing reports for the energy sector.

You'll gain basic knowledge about the refrigeration and air-conditioning industry, learn about single phase 230v, refrigeration tubing and fitting, basic vapour compression systems and basic operating conditions of air-conditioning systems.

Prerequisites

Applicants are expected to have the equivalent of Year 10 level skills in literacy and numeracy.

You'll sit a multiple-choice test to assess your skills in literacy, numeracy and spatial reasoning.

Industry connections

Guest speakers from industry will enhance your learning experience.

An industry engagement day is organised near the end of your program to provide you with relevant information on regulations, key employers and employment opportunities.

Students are also connected through industry associations and the RMIT Skills and Jobs Centre to assist with securing an apprenticeship.

Professional recognition

This qualification is recognised by the Electrical Trades Union (ETU) and the National Electrical and Communications Association (NECA).

You'll receive exemptions if you go on to study the:

- Certificate III in Air-conditioning and Refrigeration (apprenticeship)
- Certificate III in Electrotechnology Electrician (apprenticeship)

Next steps

When you finish this pre-apprenticeship, you'll have the basic skills to seek an apprenticeship as an electrician or a refrigeration/air-conditioning mechanic.

RMIT Code | Campus | Duration | NCC National Curriculum Code

Certificate III in Air-conditioning and Refrigeration

Apprenticeship

	C3295
	Blended delivery (online and face-to-face)
	Option 1: Four years part-time, one day on-campus per week or **Option 2**: Four years part-time, full-time block release of seven weeks per year
NCC	**NCC** UEE32211 **rmit.edu.au**/programs/c3295

The Certificate III in Air-conditioning and Refrigeration is for people who are employed as air-conditioning and refrigeration apprentices.

This program provides you with the skills to select components, install, set up, test, fault find, repair and maintain refrigeration systems, large-scale equipment for food storage and preservation, and air-conditioning and air distribution equipment. It includes regulatory requirements for purchasing and handling refrigerants.

On-the-job training with your employer is combined with studying at RMIT. You'll complete practical and theoretical classes to gain the skills and knowledge to work at a trade level in the refrigeration and air-conditioning industry.

Daniel Farrugia

I chose to study at RMIT because my father studied here, and recommended it as the best place to learn. The RMIT program prepared me really well for work. It taught me the principles behind the methods we use, and why things work the way they do.

What you will study

You'll learn to:

- Identify work health and safety hazards and document control measures
- Fix, secure, mount, do basic fitting and fabrication techniques
- Use drawings, diagrams, cable schedules, standards, codes and specifications
- Carry out basic connections of refrigeration and air-conditioning piping/tubing and fittings
- Install refrigeration and air-conditioning systems and associated equipment
- Rest and visually inspect refrigeration and air-conditioning systems and components for safety
- Locate and rectify faults in appliances intended to operate to a connected supply up to 1000 volts AC or 1500 volts DC

Industry connections

As an apprentice, you will learn while on-the-job. You may be able to be assessed in your workplace. Feedback from work supervisors and others can be used as evidence of competency, and an RMIT University assessor can visit your workplace to observe your work practice.

Professional recognition

When you graduate, you'll be eligible for a full refrigerant handling licence through the Australian Refrigeration Council (ARC).

Career

Air-conditioning and refrigeration mechanics can work in commercial food storage, air-conditioning, transport refrigeration and industrial processing systems, in offices, technical laboratories, workshops or onsite.

Next steps

You may further your studies with the Certificate IV in Refrigeration and Air-conditioning Systems to develop specialist skills that will enable you to work on larger systems and work for yourself. You can also complete a dual trade qualification with the Certificate III Electrotechnology Electrician.

RMIT Code | Campus | Duration | NCC National Curriculum Code

Certificate III in Electrotechnology Electrician

Apprenticeship

	C3296
	Blended delivery (online and face-to-face)
	Four years part-time, one day on-campus per week
NCC	**NCC** UEE30811 **rmit.edu.au**/programs/c3296

The Certificate III in Electrotechnology Electrician is an apprenticeship program. This program provides you with the skills to select, install, set-up, test, repair and maintain electrical systems and equipment.

On-the-job training with your employer is combined with studying at RMIT. You'll complete practical and theoretical classes to gain the skills and knowledge to work at a trade level in the electrical industry.

When you graduate, you'll have satisfied the Electrical Regulatory Authority Council's requirements to become a licensed electrician.

Katrina Palmer
Certificate III in Electrotechnology Electrician

By the time I finish, I will have completed programs in electrical, instrumentation and control. This will give me the qualifications and experience I need to work as both an electrician and instrument technician.

If your employer wants you to gain skills in instrumentation you can enroll in either the Certificate IV in Electrical – Instrumentation or the Certificate IV in Instrumentation and Control. You'll develop skills in instrumentation while meeting the Electrical Regulatory Authority Council's requirements to be a licensed electrician.

What you will study

You'll learn about:

- Identifying work health and safety hazards and document control measures
- Fabrication, dismantling and assembling of utilities industry components
- Use of drawings, diagrams, cable schedules, standards, codes and specifications
- Solving problems in AC and DC circuits
- Arranging circuits, control and protection for general electrical installations
- Troubleshooting and repairing faults in low-voltage electrical apparatus and circuits
- Developing and connecting electrical control circuits
- Installing low-voltage wiring, appliances and accessories

Industry connections

As an apprentice, you will learn while on-the-job. You may be able to be assessed in your workplace for some or all of your courses. Feedback from work supervisors and others can be used as evidence of competency, and an RMIT University assessor can visit your workplace to observe your work practice.

Professional recognition

Successful completion of this qualification allows students either to apply for an Electrician's licence through Energy Safe Victoria (ESV) or to apply for an Open Cabler Registration licence endorsed by the Australian Communications and Media Authority (ACMA). Registration fees apply, payable to the licensing body.

Career

Skills in electrotechnology remain in high demand, particularly in industries such as construction, mining and manufacturing.

Electricians can work in-house for large companies, within smaller operations, as external consultants or as self-employed tradespeople. Some electricians may undergo further study to develop skills in electrical engineering, dual trade qualifications or a specialisation.

Next steps

You may further your studies with the Certificate III in Air-conditioning and Refrigeration to complete a dual trade qualification.

RMIT Code | Campus | Duration | NCC National Curriculum Code

Certificate IV in Instrumentation and Control

	C4317
	Blended delivery (online and face-to-face)
	Four years part-time
NCC	**NCC** UEE42211 **rmit.edu.au**/programs/c4317

The Certificate IV in Instrumentation and Control is for people who are employed as instrument or electrical apprentices, or for licensed electricians who would like to upskill in the area of instrumentation and become a dual tradesperson.

This program provides you with the skills to select, install, set up, troubleshoot, repair, maintain and commission instruments to measure and record physical and chemical actions, and associated process control systems.

On-the-job training with your employer is combined with studying at RMIT. You'll complete practical and theoretical classes to gain the skills and knowledge to work at a trade level in the electrical or instrumentation industries.

Richard Imierowicz
Certificate IV in Instrumentation and Control

I've learnt the fundamental principles needed to do my job, and also gained practical experience. The highlights have been the friends I've made, networking opportunities and being awarded the Best Instrument Apprentice.

What you will study

You'll learn about control concepts, pressure, level and flow measurement principles, proportional-integral-derivative (PID) control principles, process control systems and industrial networking.

You'll gain skills in:

- Checking instruments for accuracy and calibrating them to manufacturers' specifications
- Installing industrial instruments and equipment such as control panels, sensors, transmitters and controllers
- Developing and verifying discrete control programs for programmable controllers
- Using instrumentation drawings, diagrams, standards, schedules and equipment manuals
- Finding and rectifying faults in final control elements
- Industrial networking

Industry connections

This program has strong links to industry through a well-established Industry Advisory Committee (IAC). The IAC includes industry professionals from a range of organisations, who provide regular feedback on the program and the changing needs of industry.

Teaching staff have extensive industry experience and networks.

Graduates can apply for an A grade electrical license through Energy Safe Victoria.

Career

There is a significant shortage of trained specialists in instrumentation and control. Qualified tradespeople who have expertise across both areas can expect strong employment opportunities.

When you complete this program you can find work in:

- Lighting
- General power
- Fire protection and security
- Robotics and automated process systems
- Instrumentation (food processing, water, petrochemical, mining and manufacturing)
- Optical data and voice systems
- Electrical motors and control systems

Next steps

Graduates may be eligible to apply for credit towards the Advanced Diploma of Engineering Technology – Electrical.

RMIT Code | Campus | Duration | NCC National Curriculum Code

Plumbing

Plumbers lay out, install, test and maintain pipes, fixtures, metal roofing, fittings, gas meters and regulators. They ensure the delivery of clean water, as well as drainage and sanitation.

Plumbers install and repair equipment such as: boilers, pumps, heating and cooling systems, natural gas appliances, water tanks, solar-heating systems, sinks, basins and showers.

They can be self-employed, work in small firms or with large construction companies. Plumbers are mainly employed in construction, electricity, gas, water and waste services, public administration and safety.

Certificate II in Plumbing

Pre-apprenticeship

	C2226
	Blended delivery (online and face-to-face)
	16 weeks full-time
NCC	**NCC** 22569VIC **rmit.edu.au**/programs/c2226

This is a free TAFE priority course. Check your eligibility and commencement dates at* **rmit.edu.au/freetafe.

The Certificate II in Plumbing provides you with basic skills and training in the plumbing field. It can be an important first step to your career as a plumber.

Studying full-time at RMIT, you'll undertake practical workshops to give you hands-on experience, as well as important theory classes to give you a solid understanding of the industry. You can also complete on-the-job work experience to better prepare you for a full-time apprenticeship.

When finished, you'll have the skills and knowledge that an employer looks for when hiring an apprentice.

RMIT Code Campus

Duration NCC National Curriculum Code

What you will study

You'll learn about the plumbing industry, understand its expectations and how you can progress.

You'll gain basic knowledge and skills through workshop classes, which develop your understanding of welding, sheet metal, roofing, drainage, sanitary, water and gas principles. These skills will be practised at work placements.

Prerequisites

Applicants are expected to have the equivalent of Year 10 level skills in literacy and numeracy.

You'll be required to sit an entrance assessment to establish your English, mathematical and spatial-reasoning skills

This assessment will be conducted as part of the selection process. You can apply for special consideration.

Industry connections

Guest speakers from industry will enhance your learning experiences.

An industry engagement day is organised near the end of your program to provide you with relevant information on regulations, key employers and employment opportunities.

Students are also connected through industry associations and the RMIT Skills and Jobs Centre to assist with securing an apprenticeship.

Professional recognition

On successful completion of this course students are eligible to receive the Victorian endorsed Certificate II in Plumbing (Pre-Apprenticeship) Code 22569VIC. This qualification is highly regarded by the Plumbing industry employers as a suitable entrance requirement into a Plumbing Apprenticeship.

Career

Plumbers continue to be in high demand in Australia, and the job outlook is very strong. Plumbers may be self-employed, employed in small firms, or employed in large construction firms.

Many students find apprenticeships while still studying this program. A high percentage of students who successfully complete this program find an apprenticeship within six months.

Next steps

When you finish this pre-apprenticeship, you'll have the basic skills to seek an apprenticeship as a plumber.

Certificate III in Plumbing

Apprenticeship

	C3312
	Blended delivery (online and face-to-face)
	Up to four years part-time, delivery by block release
NCC	**NCC** CPC32413 **rmit.edu.au**/programs/c3312

This program provides training for plumbing apprentices. It covers the practical and theoretical aspects of the industry. You will specialise in gas-fitting, water, sanitary, roofing and drainage during the first three stages of training. If your employer agrees, you can choose to complete a fourth stage – mechanical services.

After completing your apprenticeship and Journeyman's exam you can apply to the Victorian Building Authority to become a registered plumber.

Jason Alford
Certificate III in Plumbing

The hands-on learning approach at RMIT, when combined with my on-the-job training, meant I felt very prepared for real work. This was one of many reasons why I enjoyed studying at RMIT.

What you will study

You'll study five streams of plumbing: drainage, gas, roofing, sanitary and water. There is an optional stream in mechanics that can be added to the five streams.

Examples of what you'll study include:

- Fusion pipe welding
- Gas principles
- Installation of sanitary systems
- Levelling
- Measurement and calculation
- Mechanical principles
- Plumbing standards
- Regulation, roof safety and installation

Industry connections

As an apprentice you will learn while on-the-job, and you may be assessed in your workplace for some or all of your courses. Feedback from work supervisors and others can be used as evidence of competency, and an RMIT University assessor can visit your workplace to observe your work practice.

Professional recognition

This program is recognised by plumbing associations and organisations such as the Master Plumbers and Mechanical Services Association of Australia and the Communications Electrical Plumbing Union. Apprentices can apply to the Victorian Building Authority to become a registered plumber once they have completed the Certificate III in Plumbing qualification and successfully completed the VBA registration exam.

Career

Trained plumbers install and repair equipment such as boilers, pumps, heating and cooling systems, natural gas appliances, water tanks, solar-heating systems, sinks, basins and showers.

Plumbers may be self-employed, employed in small firms, or employed in large construction companies.

With new construction continuing to grow, the need for maintenance of infrastructure is increasing. The demand for skilled professionals in the plumbing trade remains strong, and graduates can expect excellent employment opportunities.

Next steps

You may further your studies with the Certificate IV in Plumbing and Services to gain licence accreditation in a range of specialist plumbing areas in order to become a licensed builder.

RMIT Code | Campus | Duration | NCC National Curriculum Code

Carpentry

Carpenters are skilled artisans who work with wood and other materials to repair or build frameworks such as walls, roofs, windows, doors and cabinetry in buildings.

A carpenter usually follows blueprints or other specifications and work in various areas of construction.

Certificate III in Carpentry

Apprenticeship

	C3320
	Blended delivery (online and face-to-face)
	Four years
NCC	**NCC** CPC30211 **rmit.edu.au**/programs/c3320

This certificate provides you with the skills and knowledge needed to gain employment as a carpenter in the building and construction industry, one of the largest industries in Australia. It will also prepare you to further your studies in building and construction, if you choose to.

On-the-job training with your employer is combined with face-to-face training and assessments with a RMIT trainer, as part of this work-based learning model. The curriculum will provide extensive opportunities for you to build your understanding of work expectations and the development of skills and knowledge specific to your trade.

RMIT Code Campus Duration NCC National Curriculum Code

What you will study

You'll learn about:

- Using carpentry tools and equipment
- General demolition of minor structures
- Levelling operations
- Working effectively and sustainably in the construction industry
- Planning and organising work
- Read and interpret plans and specifications
- Carry out excavation
- Construct wall and ceiling frames, pitched roofs, eaves and timber external stairs
- Install exterior cladding.

Industry connections

You will engage with industry through your employment as an apprentice.

Engagement with industry will be achieved by a combination of work-based jobs at the workplace related to carpentry, work integrated learning, and mentoring and coaching by the workplace supervisor. Industry specialists may be included in the delivery of work-based learning and assessments.

Professional recognition

Once you have successfully completed the competencies of this certificate, you will be eligible for registration with the Victorian Building Authority.

Career

The Certificate III in Carpentry offers you diverse career options as a carpenter, joiner, shop-fitter or form worker.

Next steps

You may further your studies with the Diploma in Building and Construction to examine the principles, techniques and regulations of the building and construction industry for medium-rise and wide-span buildings up to 25 metres high.

Interest Areas and Programs

Building and construction

The Building and Construction industry create and shape the spaces we live and work in every day

More than half the world's population live in cities. With the increase in urbanisation, the development of our environment is about more than just constructing buildings and roads.

Our accredited programs connect you with industry mentors to gain professional skills to design, plan, shape, finance and manage the urban spaces we work and live in.

The construction industry makes up **8.8%** of Australia's workforce.

In the last five years, the construction industry grew by **7%**.

80,000 workers will be needed in the construction industry in the next five years.

The five largest construction occupation in 2020 were Carpenters and Joiners, Electricians, Construction Managers, Plumbers, and Building and Plumbing Labourers.

The number of women in construction grew by **34%** from 2015-2020.

Diploma of Building and Construction (Building)

	C5256
	City Campus
	Blended delivery (online and face-to-face) Full-time two years Part-time five years
NCC	**NCC** CPC50210 **rmit.edu.au**/programs/c5256

In this diploma, you'll examine the principles, techniques and regulations of the building and construction industry for all types of medium-rise and wide-span buildings up to 25 metres high.

Graduates have the option to continue further studies in construction, project management, or property services with RMIT.

*Students require a Construction Induction Card (CPCCOHS1001A Work Safely in the Construction Industry) to take part in required site visits and or/ associated assessment.

RMIT Code Campus Duration NCC National Curriculum Code

What you will study

This practical curriculum incorporates hands-on work and project-based learning. You'll experience many aspects of building projects and understand how they all relate to each other. You'll go on site excursions to gain hands-on field experience which will include visits to residential and commercial construction projects.

Industry connection

This diploma has been developed in response to industry needs, and it is recognised by building and construction industry organisations.

Professional Recognition

While studying you are eligible to apply for student membership with the Australian Institute of Building. Upon graduation this membership can be upgraded to associate membership.

Career

Graduates of this diploma can explore career paths in:

- Building and construction labouring, supervision and management
- Estimating and purchasing
- Contracts administration.

Next Steps

If you are interested in further study in this field, completing this diploma can give you up to three semesters' credit toward the **Bachelor of Applied Science (Construction Management) (Honours)**, or up to two semesters' credit toward either the **Bachelor of Applied Science (Project Management) (Honours)** or the **Bachelor of Applied Science (Property and Valuation) (Honours)**.

Surveying

Surveying is the collection, management and presentation of information that relates to mapping and Geographical Information Systems (GIS).

Certificate IV in Surveying and Spatial Information Services

	C4417
	Blended delivery (online and face-to-face)
	Full-time 6 months
NCC	**NCC** CPP41721 **rmit.edu.au**/programs/C4417

During the Certificate IV in Surveying and Spatial Information Services, you'll learn how to use surveying technologies and software to capture, process and present electronic data, and gain practical experience with industry-standard equipment.

RMIT Code Campus Duration NCC National Curriculum Code

What you will study

You will learn how to collect and interpret spatial data in various forms and operate surveying equipment to support the land surveying industry.

You'll become experienced in the field and be able to plan and conduct field surveying operations, operate surveying equipment, collect spatial data using a total station, collect spatial data using GNSS and set out site and building works.

In the office, you'll also learn how to produce basic plans of survey, store, maintain and retrieve spatial data, apply GIS software to spatial problems, design and produce maps and digitally enhance and process image data.

Industry connections

You'll gain industry exposure through regular seminars with guest speakers, and have opportunities to take part in simulated spatial science and survey activities at our Bundoora field station.

Next steps

Successful completion of the Certificate IV in Surveying and spatial information services guarantees entry into the **Diploma of Surveying**. Successful completion of the Diploma of Surveying guarantees entry into the **Advanced Diploma of Surveying**.

Career

Graduates are employed in the spatial information industry as assistants to land surveyors, survey technicians, GIS/GPS operators or as computer draftspersons.

You may initially work in areas like land management, civil and structural engineering, or asset management for local government or mining companies.

Diploma of Surveying

	C5368
	Blended delivery (online and face-to-face)
	Full-time 1 year
NCC	**NCC** CPP50116 **rmit.edu.au**/programs/c5368

Surveying relies on the collection, management and presentation of information that relates to mapping and GIS.

In this diploma, you'll extend your knowledge with increased practice and engagement with digital technologies and surveying tools that map and display information from multiple databases.

RMIT Code | Campus | Duration | NCC National Curriculum Code

What you will study

You will learn to conduct advanced Global Navigation Satellite System data collection and set-out surveys, create engineering drawings, and perform advanced computations.

There is a focus on geodetic surveying, including how to perform geodetic computations. You will also learn how to undertake site surveys and set-out procedures for building projects, and develop a subdivision survey design for local government approval.

You will become more experienced with data and be able to manipulate and analyse geographic information system data and use complex spreadsheets.

Industry connection

We offer industry exposure through regular seminars with guest speakers, and opportunities to take part in simulated spatial science and survey activities at our Yarra Bend field station.

You can also expand your professional network through events hosted by RMIT, by signing up for **RMIT Mentoring** and getting matched with an industry professional, and with a student membership with the **Surveying and Spatial Sciences Institute**.

Professional Recognition

You'll be eligible for free student membership to the **Surveying and Spatial Sciences Institute** and the **Institution of Surveyors Victoria.**

Next Steps

On completion of this diploma, you'll be eligible for entry into the **Advanced Diploma of Surveying**.

Advanced Diploma of Surveying

	C6156
	Blended delivery (online and face-to-face)
	Full-time 1 year
NCC	**NCC** CPP60116 **rmit.edu.au**/programs/C6156

In this advanced diploma, you'll gain the educational and practical training you'll need to extend your career in the surveying, mapping, and geographical information systems (GIS) industries.

Career

You may be employed in the surveying industry as an assistant to a land surveyor, survey technician, survey field party leader, GIS/GPS operator, or computer draftsperson.

You may initially work in areas such as land management, civil and structural engineering, or asset management for local government or mining companies.

What you will study

You'll use cutting-edge technologies and software and take part in land development exercises. You will also learn cadastral surveying.

Throughout this diploma, you will develop the capacity to conduct an advanced global navigation satellite system, control and monitor complex engineering surveying structures.

You'll design a spatial project plan, and learn how to apply quality control measures to the spatial information services industry.

As part of this diploma, you will act as a surveying team leader for your major project, conduct research into an issue, and present your findings.

Prerequisites

The **Diploma of Surveying** is a prerequisite for this program.

Industry connections

RMIT has strong industry partnerships through our Industry Advisory Committee and regular visits to workplaces to get feedback on the industry's training needs.

We facilitate student placements and employment through A Life Without Limits and invite industry partners to give presentations.

We also host industry events for the Surveying and Spatial Science Institute, Surveying Task Force, and the Land Surveying Commission.

Professional recognition

You'll be eligible for free student membership to the **Surveying and Spatial Sciences Institute** and the **Institution of Surveyors Victoria.**

Next steps

Graduates may go onto further study and be eligible for exemptions to:

- Bachelor of Applied Science (Surveying) (Honours)
- Bachelor of Science (Geospatial Science) (Honours)

RMIT Code | Campus | Duration | NCC National Curriculum Code

What's next...

Federal investment in infrastructure signals job growth in building and trades

The Australian Government's $110 billion investment in infrastructure, which was featured in the 2021-22 Budget[12], is designed to drive job growth as we approach a new normal. The investment predominantly includes nationwide road and transport upgrades, such as light rail and highway funding.

As more projects commence, the industry will demand more skills in building and trades. In fact, experts believe that 15,000 workers in structural and civil trades will be needed to cover the skills shortages. Victoria, Tasmania and Queensland present the biggest career opportunities as a result of new major projects like the North East Link upgrade in Melbourne.[13]

Gain the building and trades skills you need now and in the future at RMIT. Our courses are developed alongside industry and respond to the changing needs of the construction workforce. We offer Certificate IIs and apprenticeship courses in three trade disciplines: electrical and instrumentation, plumbing and gas-fitting, and refrigeration and air-conditioning.

Click here to learn more about RMIT's building and trades courses

The construction industry will continue to work towards gender diversity and inclusion[14]

With women only making up 12.6% of the workers in the Australian construction industry, gender diversity and inclusion continue to be strategic priorities.

The Victorian Government will continue to roll out the Women in Construction Strategy 2019-2022, backed by $500,000 in state funding. Encouraging more girls in school to explore trades as a viable career, rethinking existing recruitment strategies and retaining current female staff are key components of the Strategy.

Learn how project planning, coordination and control work together in RMIT's Diploma of Building and Construction (Building). You'll learn in real and simulated industry conditions, and emerge with the skills to pursue a career in building supervision, construction management, estimating or contracts administration. Through VTAC's SEAS, female applicants receive bonus points towards their application. This diploma is also a Free TAFE and JobTrainer course, meaning you could be eligible for free or low-fee tuition.

What's next...

Leaders in building and construction are shifting to technologies like digital twins[15]

Digital twins will allow building maintenance and operations to become a better-planned, cost-saving and more environmentally-friendly process by creating data-driven simulated models of our cities first. Tomorrow's engineers, builders and urban planners will need to show skills in technology, data and analytics to improve infrastructure planning and development.

Launch your career in surveying, mapping and geographical information systems (GIS) in RMIT's one-year Diploma of Surveying. You'll gain hands-on experience with the digital technologies, surveying tools and data analysis techniques that you'll use on the job. As part of your assessment, you'll also conduct an engineering surveying project in a work-integrated learning (WIL) environment.

Sources

[1] Victoria's Big Build 'Skilling up for Victoria's biggest road project' 2021
[2] Hays 'The most in-demand skills for 2021' report 2020
[3] Seek job ads (Building Estimator)
[4] Seek job ads (Construction Manager)
[5] Seek job ads (Plumber)
[6] Australian Government, Labour Market Information Portal for the Construction industry
[7] ABC News 'Increasing number of Australian women putting up their hand to work in trades' 2021
[8] Australian Government, National Skills Commission 'Technicians and Trades Workers' 2020
[9] Australian Government JobOutlook for Contract, Program and Project Administrators
[10] Australian Government JobOutlook for Construction Estimators
[11] Australian Government JobOutlook for Surveyors
[12] Australian Government, Department of Infrastructure, Transport, Regional Development and Communications '2021-22 Budget'
[13] The Sydney Morning Herald 'Big build cut down by shortage of workers, cost blowouts' 2021
[14] Victorian Government 'Victoria's Women in Construction Strategy'
[15] EY 'Digital twin: the Age of Aquarius in construction and real estate' whitepaper 2021

Correct as at October 2021

Acknowledgement of Country

RMIT University acknowledges the people of the Woi wurrung and Boon wurrung language groups of the eastern Kulin Nations on whose unceded lands we conduct the business of the University. RMIT University respectfully acknowledges their Ancestors and Elders, past and present.

RMIT also acknowledges the Traditional Custodians and their Ancestors of the lands and waters across Australia where we conduct our business.

Contact

Building and trades apprenticeship enquiries
Email: studentlifecycle@rmit.edu.au

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