

# Engineering and the built environment



# Building design, furniture, cabinet making, and construction

New technologies in this industry sector are creating a demand for people with the right qualifications and skills, and up-to-date knowledge of current practices. There are opportunities in a range of settings in the building and construction industry including the commercial and domestic kitchen, bathroom and furniture industries.

Contact us for more detailed course information, career opportunities, subject information, and entry requirements.

## Building design

**Phone** 02 6055 6699 | **Email** [buildingdesign@wodongatafe.edu.au](mailto:buildingdesign@wodongatafe.edu.au) | **Web** [www.wodongatafe.edu.au](http://www.wodongatafe.edu.au)

## Furniture, cabinet making, and construction

**Phone** 02 6055 6767 | **Email** [timberstudies@wodongatafe.edu.au](mailto:timberstudies@wodongatafe.edu.au) | **Web** [www.wodongatafe.edu.au](http://www.wodongatafe.edu.au)

Course code	Course title	Info session	How to apply		Duration	Mode				
			VTAC	Direct		Apprenticeship	Traineeship	Full-time	Part-time	Distance education
21844VIC	Certificate II in Building and Construction (Carpentry) Pre-apprenticeship				• 17 weeks			•		
CPC30208	Certificate III in Carpentry				• 3 years	•				
LMF20309	Certificate II in Furniture Making				• 16 weeks				•	
LMF32109	Certificate III in Cabinet Making				• 3 years	•			•	
21953VIC	Advanced Diploma of Building Design (Architectural)	•	•	•	2.5 years			•		

## Certificate II in Building and Construction (Carpentry) Pre-apprenticeship 21844VIC

Completion of this qualification opens employment opportunities for you in the building construction and building design industries. It also provides you with credits towards a carpentry apprenticeship.

## Certificate III in Carpentry CPC30208

All assessment for this apprenticeship is undertaken onsite, which means more flexibility and less downtime for apprentices. A large range of electives is available to suit all areas of carpentry, domestic and commercial construction, formwork, and industrial carpentry work.

## Certificate II in Furniture Making LMF20309

This course gives you the skills and knowledge you need to work or commence an apprenticeship in the furniture-making industry. It also provides you with credits towards an apprenticeship.

## Certificate III in Cabinet Making LMF32109

As a qualified tradesperson after you complete this apprenticeship, you will be able to enter a range of fields in the cabinet-making industry. You may gain employment as a furniture maker, kitchen manufacturer, shop fitter, joiner, reproduction furniture maker, furniture restorer, or boat interior fitter.

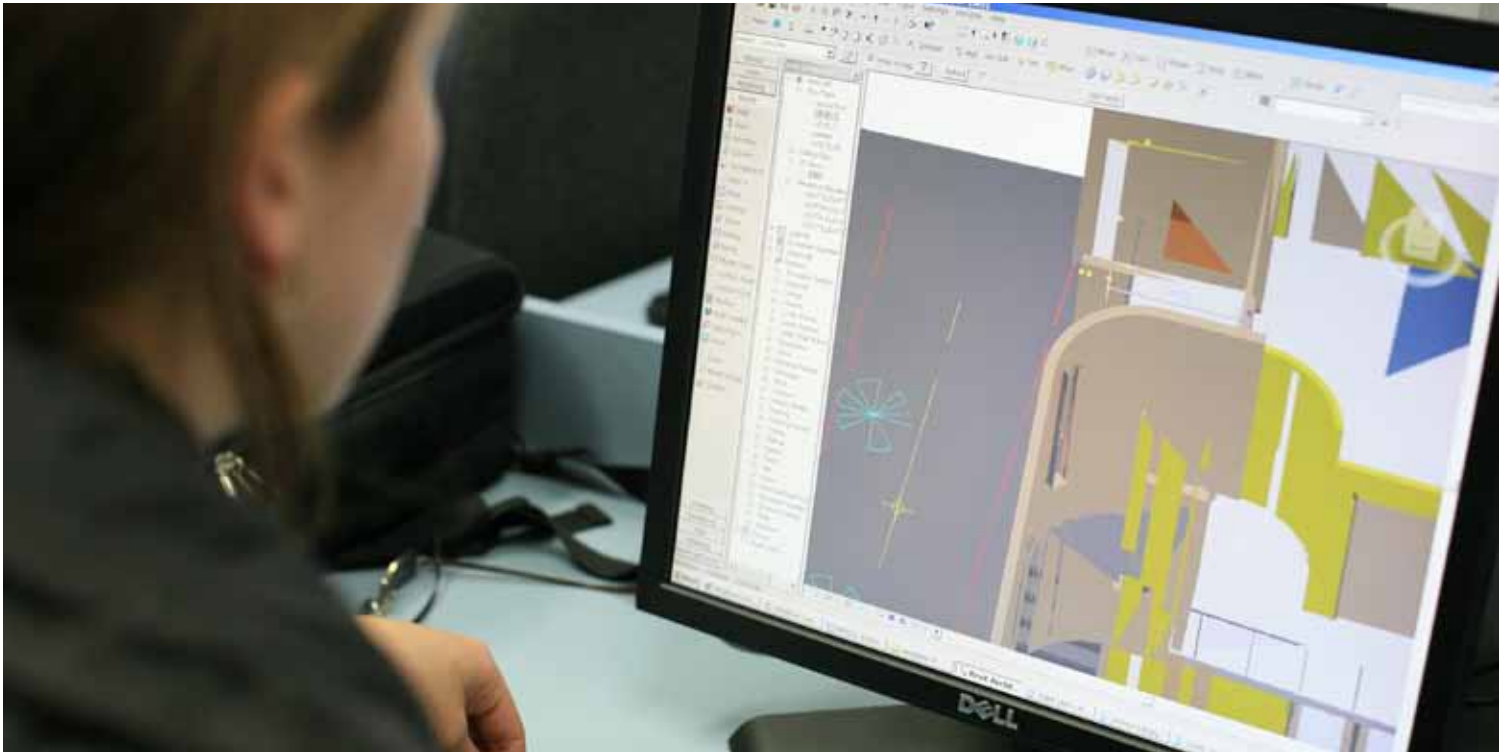
## Advanced Diploma of Building Design (Architectural) 21953VIC

Successful completion of this course may lead you to employment opportunities with architects, builders, building designers, building inspectors, or surveyors.

This course may articulate into degree courses in architecture, building construction management, and interior design.

This qualification leads to your registration as a building designer, as required in Victoria by the Building Commission.





## Construction is the industry of the future

There's never been a better time than now to start a career in the construction industry. Does that sound like fancy PR? Don't worry! Many people are not aware of the incredible job and career opportunities for young people in the construction industry. It is, after all, the industry of the future.

Yes, it's a big statement but there's plenty of evidence to back it up.

Over seven per cent of all Australian jobs are in the construction industry. That percentage is almost the equivalent of Australia's entire economy. That makes it huge. And not just huge, but expanding. Housing alone makes up half these figures, and half of that is in the ever-growing renovations market.

### The days of boom or bust are long gone

More stable interest rates and the growing importance of renovation activity, which is far less cyclical, means that the severe peaks and troughs once endured in the construction industry have been smoothed.

### Interesting and exciting career paths

Interesting and exciting career paths are available in fields as diverse as, for example, information technology, design, sales, marketing, estimating, trades, planning, law, landscaping, and architecture. Whether it's via an academic route, an apprenticeship, or work experience, there are plenty of pathways to success.

### Australians will always need homes

It's a basic truth that people will always need homes, shops, restaurants, office buildings, roads, and any number of other items that you can bring to mind. People who are clever, committed, and highly skilled have to design, build, promote, maintain, and renovate these structures.

**Source** HIA Big Plans, accessed at [www.bigplans.com.au/home.html](http://www.bigplans.com.au/home.html)



# Engineering

Career opportunities in the metal and fabrication industry are numerous as skilled tradespeople in this area are in extremely high demand.

Our fully-equipped metal industries workshops cater for students at all levels, from beginner welding to engineering. Many of the region's fabrication and welding apprentices from small to large manufacturers undertake their 'block release' practicums in these workshops.

Contact us for more detailed course information, career opportunities, subject information, and entry requirements.

**Phone** 02 6055 6645 | **Email** manufacturing@wodongatafe.edu.au | **Web** www.wodongatafe.edu.au

Course code	Course title	Info session	How to apply		Duration	Mode				
			VTAC	Direct		Apprenticeship	Traineeship	Full-time	Part-time	Distance education
22019VIC	Certificate II in Engineering Studies				• 15 weeks					
MEM20105	Certificate II in Engineering				• 12 months		•			
MEM20205	Certificate II in Engineering - Production Technology				• 2 years		•			
MEM30105	Certificate III in Engineering - Production Systems				• 3 years		•			
MEM30205	Certificate III in Engineering - Mechanical Trade				• 3 years	•				
MEM30505	Certificate III in Engineering - Technical				• 1 year		•			
MEM30305	Certificate III in Engineering - Fabrication Trade				• 3 years	•			•	
21621VIC	Diploma of Engineering Technology				• 1 year			•		
					2 years				•	
21622VIC	Advanced Diploma of Engineering Technology				• 2 years			•		
					4 years					•
Units from MEM40105	Basic certificate course in welding Units from Certificate IV in Engineering				• 6 months					•
	Intermediate certificate course in welding Units from Certificate IV in Engineering				• 1 year					•
	Advanced certificate course in welding Units from Certificate IV in Engineering				• 1 year					•
Units from MEM40105	Welding certificate from the Welding Technology Institute of Australia (WTIA) Units from Certificate IV in Engineering				• 1 week			•		
					1 year					•

## Certificate II in Engineering Studies 22019VIC

Completion of this qualification will open employment opportunities for you in the engineering industry in the areas of fabrication, welding, and general machining. The course also includes an emphasis on career planning.

## Certificate II in Engineering MEM20105

## Certificate II in Engineering - Production Technology MEM20205

These certificate II courses are pre-apprenticeships. They may improve your chances of obtaining employment as an apprentice or a trainee in engineering or a related field.

## Certificate III in Engineering - Production Systems MEM30105

## Certificate III in Engineering - Mechanical Trade MEM30205

## Certificate III in Engineering - Technical MEM30505

These certificate III courses will enable you to become a qualified tradesperson in the engineering industry. You can then work in the mining industry in a powder-coating, boilermaking, or fitting and turning workshop, in a mechanical service, or in general and structural engineering workshops.

## Certificate III in Engineering - Fabrication Trade MEM30305

With the successful completion of this course, you gain a trade qualification and may progress to further training in management, supervision, inspection, quality control, and testing.

Qualified and skilled tradespeople can seek employment in many areas of the engineering industry, including fabrication, stainless steel areas, sheet-metal ducting, construction, maintenance, pressure plate and pipe welding.

## Diploma of Engineering Technology 21621VIC

Successful completion of this course provides you with opportunities to work in the manufacturing industry, particularly in small to medium-sized organisations. The course offers you extensive training in computer-aided design (CAD), which many employers find attractive.

The course articulates into the Advanced Diploma of Engineering Technology 21622VIC and may provide credit towards engineering studies at university.

## Advanced Diploma of Engineering Technology 21622VIC

This course is for engineers and managers in public and private sectors, across all engineering streams, and in small, medium-sized, and large enterprises. It may give you credit for a range of degree courses in engineering.

## Certificate courses in welding (basic, intermediate, and advanced) Units from MEM40105

These courses provide you with the skills you need to gain entry-level employment in the light and heavy fabrication and welding industries. We encourage you to progress through the welding courses to the advanced level of welding competencies to consolidate your knowledge and skills, which will enhance your employment opportunities.

## Welding certificate from the Welding Technology Institute of Australia (WTIA) Units from MEM40105

When you have successfully completed this course, you can look for work as a welder of pressure vessels, boilers, and pipes in the engineering industry. Career pathways exist in the fields of welding inspection and welding supervision.

## Duane Hicks is one of Wodonga TAFE's passionate teachers

'The potential to mould tomorrow's tradespeople to become the best they can be brought me to teaching', says Duane Hicks.

Duane studied metal fabrication and engineering. He came to Wodonga TAFE after growing up on a beef farm outside the township of Kiewa, in north-east Victoria.

'I came here for my trade school and found the teachers very approachable and knowledgeable', he says.

Within a few years, Duane was teaching those very same subjects at the same place he learned about them.

So, what exactly does Duane teach his students?

'The skills that students learn are really varied, from AutoCAD to robotics, welding, and fabrication', says Duane. 'Mathematics is a skill that is used across the industry too, as is problem solving.'

'We have a fully functional simulated workshop here at Wodonga TAFE which students attend', he says. 'The skills they learn here are with them for a lifetime, and are transferable to other disciplines.'

'Students can really choose where to take their careers after they finish their training.'

The industry is always changing, but Wodonga TAFE keeps its students up-to-date with the latest developments.

'With economic changes, there seems to be a shift to manufacturing and production jobs', says Duane. 'At one time, a tradesperson pressed, rolled, and fabricated. These days, machine operators use the machines, tradespeople fabricate, and welders weld.'

'The current mining boom means that job opportunities are abundant.'

With minerals and mining continuing to run the Australian economy, that situation unlikely to change. Duane and his team can give you the tools you need to succeed in this ever-expanding industry.



# Telecommunications

Your telecommunications career may cross all sectors of the industry. Opportunities exist in the design, installation, and maintenance of data communications systems such as voice services (standard telephones), high-speed data services such as the internet, pay TV, and mobile telephones.

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			VTAC	Direct		Apprenticeship	Traineeship	Full-time	Part-time	Distance education
Units from ICT30210	ACMA (Austel) open registration			•	6 sessions				•	
ICT20310	Certificate II in Telecommunications Cabling			•	Varies		•			
ICT30210	Certificate III in Telecommunications			•	Varies		•			
ICT30310	Certificate III in Telecommunications Cabling			•	Varies		•			

## ACMA (Austel) open registration

Units from Certificate III in Telecommunications  
ICT30210

This course is suitable for electricians, data cabling, telecommunications personnel, computer systems technicians, and cable TV installers who want to enter the telecommunications cabling industry.

## Certificate II in Telecommunications Cabling

ICT20310

The certificate II course provides entry-level training in the installation and operation of telecommunications equipment and products.

## Certificate III in Telecommunications

ICT30210

## Certificate III in Telecommunications Cabling

ICT30310

Successful completion of the certificate III courses will enable you to become a telecommunications tradesperson, qualified to install telecommunications equipment and products including voice and data communications.

## Bob Mann is one of Wodonga TAFE's passionate teachers

It's an exciting time for telecommunications and engineering students. Bob Mann's industry sources report that the rollout of the national broadband network will support 25,000 jobs a year.

'It requires a very large construction workforce', Bob says. 'Workers will need to be trained and skilled in numerous advanced technologies.'

The demand for high-quality engineering tradespeople is reflected across the industry.

'The demand is expected to remain high for some time yet, across areas like construction, mining, manufacturing, and fabrication.'

Bob began his career at Wodonga TAFE as a technician, responsible for the maintenance of equipment in the welding and fabrication department. After some time as a sessional teacher, he now has an ongoing teaching role.

'These days, my work involves less face-to-face teaching, and more monitoring and assessing apprentices and trainees on the job', Bob says.

'On-the-job training has real benefits', he says. 'There's less disruption in the workplace because apprentices don't have to attend classes at Wodonga TAFE. They are familiar with the equipment with which they train, and they are assessed on real jobs in real time.'

'At Wodonga TAFE, we provide comprehensive support for the trainees and apprentices.'

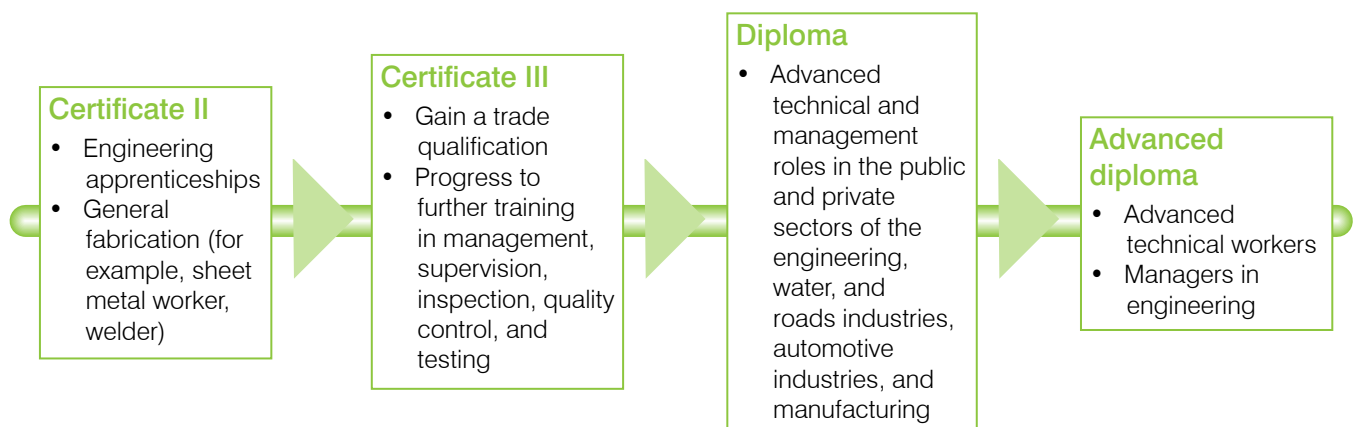


## career maps

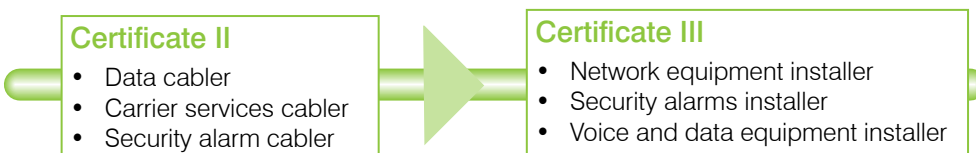
### Building design, furniture, cabinet making, and construction



### Engineering



### Telecommunications



#### Skills Recognition Centre

Recognition of prior learning (RPL) is a formal assessment process that measures the skills and knowledge you have already gained from previous study, training, work, or life experiences. Your skills and experience are mapped against the course in which you want to enrol. If your skills are recognised against elements in the course, you will not have to undertake training in these areas. This can save you time and money.

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**Wodonga TAFE** 87 McKoy Street, Wodonga |

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## Qualifications in engineering and the built environment

### Building design, furniture, cabinet making, and construction

Certificate II in Building and Construction (Carpentry) Pre-apprenticeship

Certificate III in Carpentry

Certificate II in Furniture Making

Certificate III in Cabinet Making

Advanced Diploma of Building Design (Architectural)

### Engineering

Certificate II in Engineering Studies

Certificate II in Engineering

Certificate II in Engineering - Production Technology

Certificate III in Engineering - Production Systems

Certificate III in Engineering - Mechanical Trade

Certificate III in Engineering - Technical

Diploma of Engineering Technology

Advanced Diploma of Engineering Technology

Certificate III in Engineering - Fabrication Trade

Certificate courses in welding (basic, intermediate, and advanced)

Welding certificate from the Welding Technology Institute of Australia (WTIA)

### Telecommunications

ACMA (Austel) open registration

Certificate III in Telecommunications

Certificate II in Telecommunications Cabling

### Learner services

Wodonga TAFE is committed to ensuring you have full access to a range of services to help you during your studies. To find out more about these services, please refer to the front section of the course guide folder or go to [www.wodongatafe.edu.au/student-services](http://www.wodongatafe.edu.au/student-services).



**For more** information and applications contact

Wodonga TAFE

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