



TAFE^{NSW}

ENGINEERING AND ELECTROTECHNOLOGY CAREER GUIDE

TAFENSW.EDU.AU



BE WHATEVER YOU WANT TO BE

WHY CHOOSE TAFE NSW?

GET THE JOB YOU WANT

With our diverse range of courses, strong industry connections and approaches to learning that suit all needs, we will help you to get the job you want.

You come first



TAFE NSW has been evolving and adapting to the training and education needs of NSW for over 130 years. We exist to create outstanding learner experiences and provide quality and personalised services that allow you to achieve your goals.

You are an individual



You're never just a number at TAFE NSW. Our small class sizes, student services and social facilities all create an incredibly strong support network. We will always ensure that you receive expert support in your specific area of interest.

Quality education



We partner with employers to provide mentorships, internships, work placements, and real world learning. Whatever your course, you will develop current, practical skills through both real and simulated work environments.

Strong industry connections



Our ambition is to help you with your career goals. With hundreds of partner organisations, and relationships with over 25,000 employers, we offer up-to-date industry insights and prime networking opportunities to help you develop relationships with industry. You will also discover an invaluable professional network among your teachers and fellow students.

Excellent reputation



Our teachers are experts. They have worked in their industry and are passionate about their field. We know they are the best at what they do, because that's what our graduates tell us. Teachers combine their expertise with a friendly, relaxed and supportive approach, so you can enjoy a comprehensive learning experience.



85.9%
**EMPLOYER
SATISFACTION**

NSW EMPLOYERS ARE VERY SATISFIED WITH THE QUALITY OF THE NATIONALLY RECOGNISED TRAINING WE DELIVER*



80%
**OF GROWTH
AREAS COVERED**

WE OFFER TRAINING IN 80% OF THE OCCUPATIONS PREDICTED TO HAVE THE GREATEST GROWTH OVER THE NEXT 5 YEARS^



93%
**WOULD RECOMMEND
TAFE NSW**

AS A TRAINING PROVIDER - NATIONAL VET AVERAGE 90%**



83%
**GRADUATE
SATISFACTION**

TAFE NSW ENJOYS A RATING WELL ABOVE THE NATIONAL AVERAGE FOR THE OVERALL QUALITY OF TRAINING*

Safe places for learning and growth

At TAFE NSW, you will find study spaces as well as vibrant places and opportunities to network, to socialise, and to just chill out. These include cafés, gyms, bookshops, galleries and exhibition spaces, as well as areas for student bands, barbecues and theatre performances. You may even get discounts at our student training restaurants, hair and beauty salons and massage clinics.

Student association

When you enrol at TAFE NSW, you become part of our student community. Members can take advantage of the facilities, services and activities available at many of our campuses, including recreational activities, on-campus support and job placement services.

You can often also gain access to special benefits and discounts at campus bookshops or on photocopying, printing, car parking or off-campus shopping and entertainment. Membership is open to all TAFE NSW students and staff.

Visit a TAFE NSW Student Association to join.

Libraries

At TAFE NSW, you'll gain access to our statewide network of libraries with the latest digital and print resources. Staffed with a professional team of librarians, you can get assistance with locating resources and library facilities, information services, and a range of other online support services.

You can also get access to computers and software, WiFi, individual and group study areas, photocopying, printing and scanning services (including 3D printing at some locations), as well as all the research, referencing and bibliography help you need to complete your assignments.

Online 24/7

Our online libraries are available to TAFE NSW students 24/7. Simply login to access everything, from journals to tutorials to 'ask a librarian.'

Childcare centres

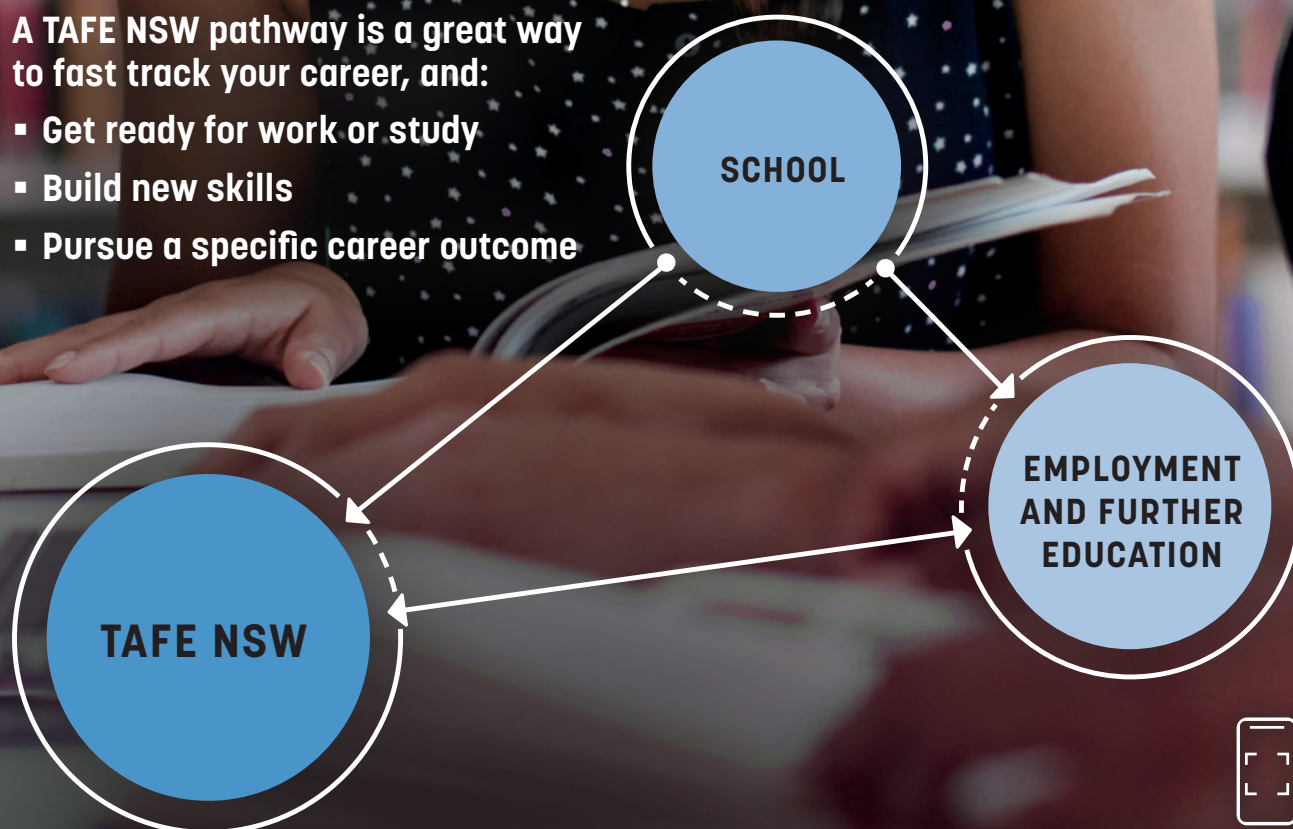
Excellent childcare facilities are provided at some TAFE NSW locations. Places may be available for children under the age of six.

Source: ^ employment.gov.au, * Graduate Satisfaction Survey - Undergraduate [Quality Indicators of Teaching and Learning (QILT) - Course Experience Questionnaire 2017-2018.]. * NCVET, Survey of Employers' Use and Views of the VET System, 2017. ** VET - NCVET Graduate Outcomes Survey 2018

PATHWAYS TO SUCCESS

A TAFE NSW pathway is a great way to fast track your career, and:

- Get ready for work or study
- Build new skills
- Pursue a specific career outcome



FORGE YOUR OWN PATH

Your pathway depends on your skills, experience, study preferences and career goals. Explore the most popular entry points here and start planning your future.

tafensw.edu.au/study/pathways

Study at TAFE NSW while at school

tafensw.edu.au/tvet



- Earn credit towards an industry recognised qualification as part of your secondary studies
- Courses, including School Based Apprenticeships and Traineeships (SBAT), may contribute towards your HSC and ATAR
- Contact your Career Advisor about options available to you

Apprenticeships and traineeships

tafensw.edu.au/careers



- Earn while you learn
- Combine on-the-job training with structured study and skills development, while working towards a nationally recognised qualification
- Full time, part time, or SBAT

Short courses

tafensw.edu.au/short-courses



- Choose from hundreds of short courses across a wide range of industries
- Courses can be completed over weeks or even days
- Learn skills to enhance your current role, or gain confidence to take the next step in your career

TAFE NSW Degrees

tafensw.edu.au/degrees



- **REAL WORLD EXPERIENCE** - enhance your employability through our internships and work placements
- **BUILD CONNECTIONS** - get a head start with our strong industry ties and job placement opportunities
- **SMALL CLASSES** - benefit from individual attention and group support

Pathways to Higher Education

credittransfer.tafensw.edu.au



- TAFE NSW courses can lead to employment or further study in a university or a TAFE NSW degree

TAFE Digital

tafensw.edu.au/digital



- Online training in more than 200 courses, many of which utilise virtual reality (VR), augmented reality (AR), mixed reality and simulation exercises, plus other modern technologies
- Enjoy easy access to our extensive learning resources, as well as real time interactions with dedicated, industry experienced teachers and your classmates

STUDENT SUPPORT SERVICES

Aboriginal student support services

TAFE NSW provides a range of Aboriginal support staff to assist you with everything from enrolment to course selection. We can also give advice on applying for fee exemptions and scholarships, as well as provide mentoring to support you throughout your TAFE NSW journey.

Disability services

TAFE NSW Disabilities Services ensure that students with a disability have access, support and equal opportunities while studying. The Disability Teacher Consultants will assist with providing reasonable adjustment based on your individual needs and the course in which you are enrolled. Disability Teacher Consultants can also help with assistive and adaptive technology needs.

Counselling and career development services

The TAFE NSW Counselling and Career Development Service is free and is designed to help you succeed in your studies, as well as in your chosen career. Prospective TAFE NSW students are able to access the service to assist with course choice decisions and career planning.

Students enrolled with TAFE NSW are able to access a range of services to assist in career development and personal support.

Learning support

TAFE NSW provides valuable learner support at our 'drop-in' or flexible learning centres, in small groups or one-to-one. Call 131 601 to find out what study support services are available at your location.

International students

tafensw.edu.au/international

Coordinators can offer advice, support and referral services to assist you during your studies. They will help you to achieve your education goals and make your time in Australia rewarding and enjoyable.

Download our International Guide today.

Scholarships

tafensw.edu.au/scholarships

TAFE NSW works with government, non-government and industry partners to develop and deliver scholarships for students who are experiencing financial, social or other barriers to study.

For more details visit tafensw.edu.au/support



GROWING INDUSTRY

ELECTRONICS AND ELECTROTECHNOLOGY INDUSTRY REVENUE WILL REACH OVER \$2.5 BILLION OVER THE NEXT FEW YEARS

ENGINEERING & ELECTROTECHNOLOGY

Sustainability, innovation, robotics, the digital age - there has never been a more exciting time to work in Engineering and Electrotechnology. It's a sector that's always advancing, so take the opportunity to build a brighter future for yourself and the planet.

You'll learn on specialist simulators and industry-standard software in learning environments that are as industry-realistic as possible. TAFE NSW study can lead you to a wide range of industries including aviation, construction, manufacturing or robotics. Whatever you do, you'll be hands-on as you work with different technologies, experiencing different challenges and rewards every day.



Job ready and sustainable focus

From sustainable technologies to communications and CAD skills, your learning is always focused on the needs of tomorrow's workplaces.



ELECTROTECHNOLOGY

Electrical trades and electronics influence almost every aspect of daily life. The digital age continues to create an unprecedented demand for electricians specialising in telecommunications, instrumentation, security and electronic control systems, plus information technology. Studying at TAFE NSW means you'll always work closely with technology to maintain, repair, and create custom solutions. And you can even connect your electrotechnology studies to a valuable degree.

IS IT RIGHT FOR YOU?

- Does the idea of creating custom solutions excite you?
- Do you enjoy getting technical?
- Do you like detailed work and using your hands?
- Are you good at maths?

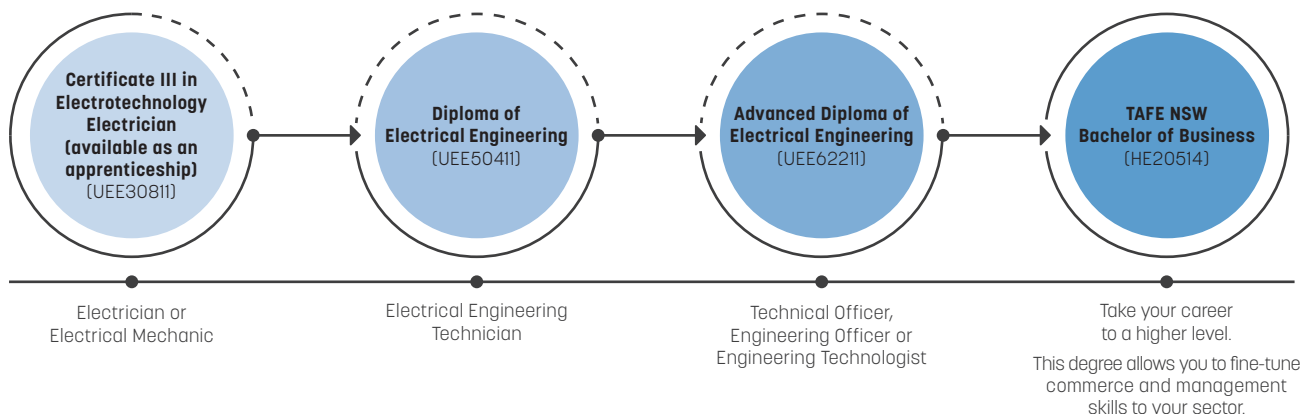
COURSES OFFERED INCLUDE:

- Instrumentation
- Electrical Fitting
- Electrical Trades
- Electronics
- Power Systems

CAREER OPPORTUNITIES

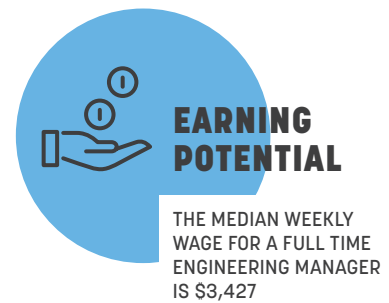
- Electrician (licensed)
- Instrumentation and Control Technician
- Electronics and Communications Technician
- Electrical Fitter
- Machine Repair Tradesperson
- Switchgear and Control Gear Tradesperson
- Security System Installer

Basic skills to a quality career



ENGINEERING

If you enjoy creative solutions, solving problems and working with machines and technology, then engineering and mechanical engineering could be for you. With developments in robotics and mechanical technologies, now is the time to get skilled for the future. Opportunities are opening up across a vast range of industries, from healthcare through to construction. So build your career in a clean and high tech environment, while helping to build a sustainable future.



IS IT RIGHT FOR YOU?

- Are you curious about how things work?
- Do you enjoy technical and mechanical activities?
- Do you like to think outside the box, to find the best solution?
- Do you love gadgets and machines?

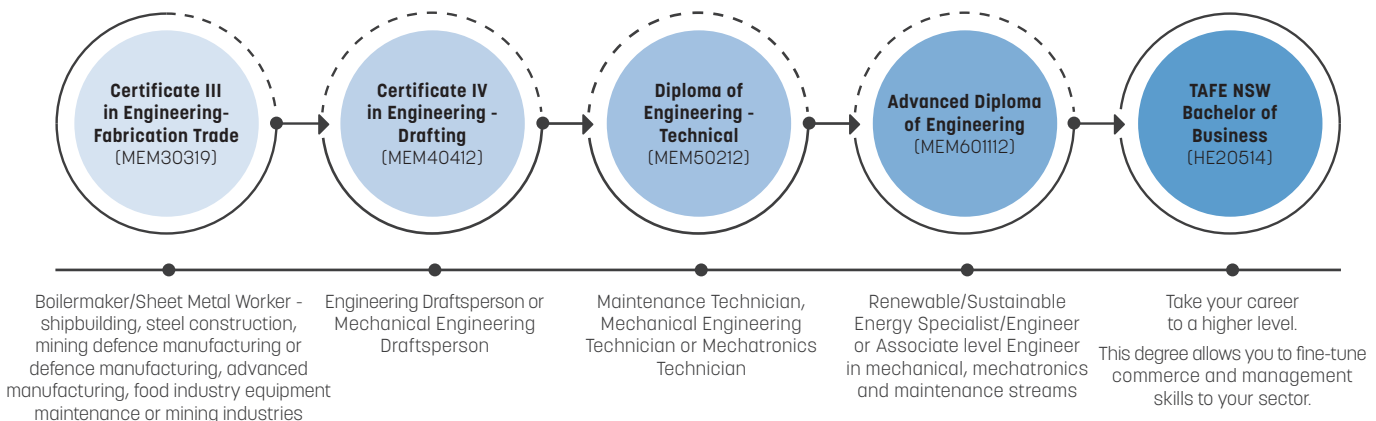
COURSES OFFERED INCLUDE:

- Engineering - Technical, Drafting
- Engineering (CNC Programming)
- Engineering (Fabrication)
- Engineering (Fluid Power)
- Engineering (Mechanical)
- Engineering (Mechatronics)
- Non-destructive Testing

CAREER OPPORTUNITIES

- Engineering Technician
- Fabrication Tradesperson
- Fluid Power Systems Engineer
- CNC Machinist
- Technology Engineer
- Mechanical Fitter

Basic skills to a quality career





At TAFE NSW I wasn't treated like a child, and that helped me. When I finished the course, I had interviews with many companies, and was offered a load of apprenticeships. I took up the job with NECA. I want to travel with the trade, you can go anywhere once you're qualified.

Dylan Narsamma,
Indigenous Electrical Pre-apprenticeship Program



AIR CONDITIONING & REFRIGERATION

Driven by population growth, globalisation, consumer trends and climate change, the heating, ventilation, air conditioning, and refrigeration (HVAC&R) industry is growing. Air conditioning and refrigeration professionals cover both electrical and mechanical areas, so careers are unique and varied. And with strong wages, interesting work and plenty of opportunity to build a long-term career, there has never been a better time to get into an HVAC&R career.

IS IT RIGHT FOR YOU?

- Do you want a career in an ever-evolving industry?
- Do you want to be part of driving technology?
- Are you keen on a growing industry with an energy focus?

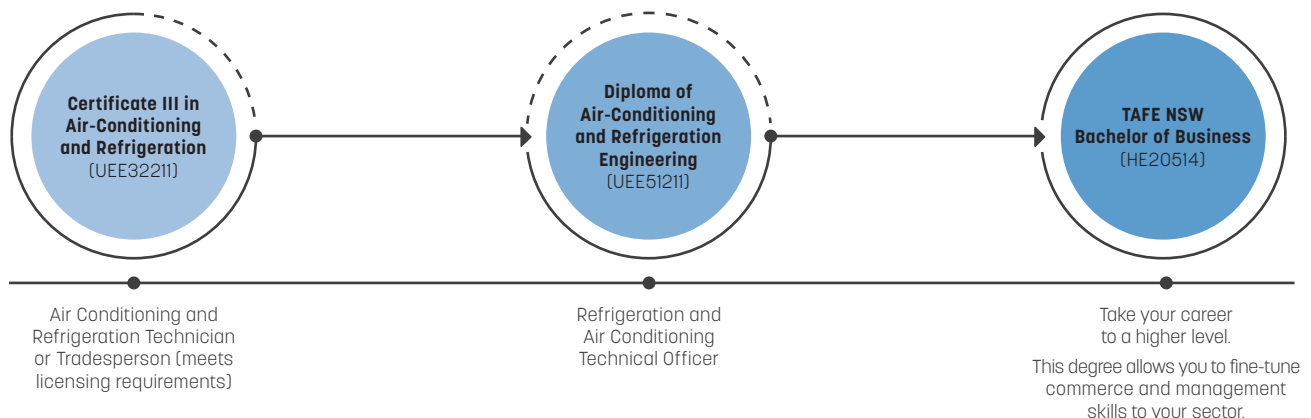
COURSES OFFERED INCLUDE:

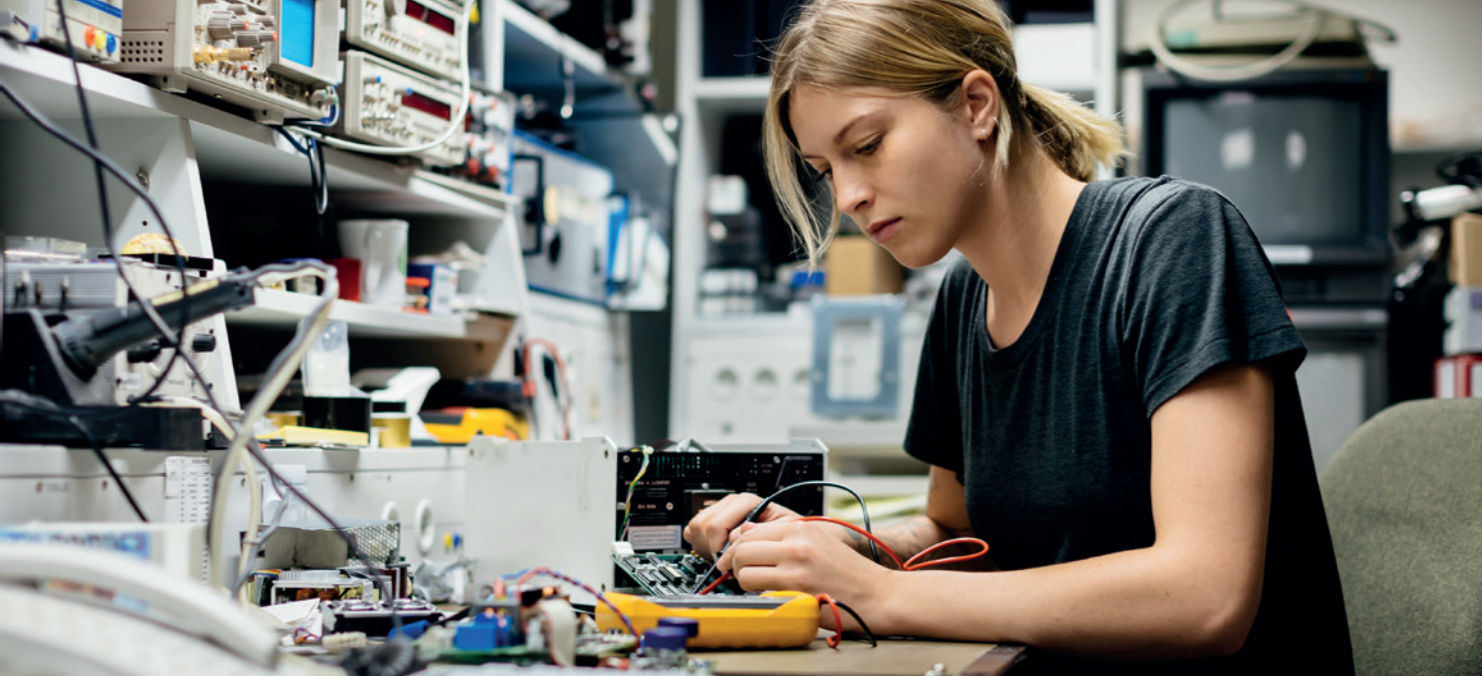
- Refrigeration Engineering
- Project Management
- Air Conditioning Mechanics
- HVAC&R Design

CAREER OPPORTUNITIES

- Paraprofessional Engineer
- Air Conditioning System Installer
- Project Manager

Basic skills to a quality career





ELECTRONICS AND ELECTROTECHNOLOGY		
COURSE	QUALIFICATION	CODE
Electrical - Engineering	Advanced Diploma	UEE62211
Engineering Technology - Electrical	Advanced Diploma	UEE62111
Engineering Technology - Electronics	Advanced Diploma	UEE61711
Electronics and Communications Engineering	Advanced Diploma	UEE60211
	Diploma	UEE50511
Electrical Engineering	Diploma	UEE50411
Electrical - Instrumentation	Certificate IV	UEE40411
Electronics and Communications	Certificate IV	UEE40711
	Certificate III	UEE30911
Electrotechnology - Systems Electrician	Certificate IV	UEE40611
Industrial Electronics and Control	Certificate IV	UEE40911
Instrumentation and Control	Certificate IV	UEE42211
	Certificate III	UEE31211
Electrical Fitting	Certificate III	UEE33011
Electrical Machine Repair	Certificate III	UEE30611
Electrotechnology Electrician	Certificate III	UEE30811*
ESI - Power Systems - Distribution Cable Jointing	Certificate III	UET30812
ESI - Power Systems - Distribution Overhead	Certificate III	UET30612*
Outdoor Power Equipment Technology	Certificate III	AUR30716
	Certificate II	AUR20816
Security Equipment	Certificate III	UEE31411
Electronics	Certificate II	UEE21911
Electrotechnology (Career Start)	Certificate II	UEE22011
Security Assembly and Set-up	Certificate II	UEE21611

COURSE ALSO DELIVERED ONLINE AT [TAFENSW.EDU.AU/DIGITAL](https://www.tafensw.edu.au/digital)

* This qualification has been superseded. For further information on the currency of this product, please refer to the TAFE NSW website: [tafensw.edu.au](https://www.tafensw.edu.au)

ENGINEERING

COURSE	QUALIFICATION	CODE
Engineering (Mechanical)	Advanced Diploma	MEM60112
Engineering - Advanced Trade	Diploma	MEM50105*
Engineering - Technical	Diploma	MEM50212
	Certificate III	MEM30505
Engineering - Technical (Mechanical)	Diploma	MEM50212
Engineering - Technical (Mechatronics)	Diploma	MEM50212
Hydraulic Services Design	Diploma	CPC50612
Polymer Technology	Diploma	PMB50116
	Certificate IV	PMB40116
Engineering	Certificate IV	MEM40105*
	Certificate II	MEM20105
	Certificate I	MEM10105*
Engineering (CNC Programming)	Certificate IV	MEM40105*
Engineering (Heavy Fabrication)	Certificate IV	MEM40105*
Engineering (Fluid Power)	Certificate IV	MEM40105*
Engineering Drafting	Certificate IV	MEM40412
Manufacturing Technology (CAD/Drafting)	Certificate IV	MSA40108
Agricultural Mechanical Technology	Certificate III	AUR30416
Engineering - Fabrication Trade	Certificate III	MEM30305*
Engineering - Fabrication Trade (Blacksmithing)	Certificate III	MEM30305*
Engineering - Fabrication Trade (Heavy Fabrication)	Certificate III	MEM30305*
Engineering - Fabrication Trade (Light Fabrication)	Certificate III	MEM30305*
Engineering - Mechanical Trade	Certificate III	MEM30205*
Locksmithing	Certificate III	MEM30805*
Manufacturing Technology (CAD/Drafting)	Certificate III	MSA30208
Mobile Plant Technology	Certificate III	AUR31216
Outdoor Power Equipment Technology	Certificate III	AUR30716
Polymer Processing	Certificate III	PMB30116
Sawdoctoring	Certificate III	FWP30716
Watch and Clock Service and Repair	Certificate III	MEM31010*
Engineering - Production Technology	Certificate II	MEM20205*
Engineering Pathways	Certificate II	MEM20413
Outdoor Power Equipment Technology	Certificate II	AUR20816

REFRIGERATION AND AIR-CONDITIONING

COURSE	QUALIFICATION	CODE
Air-conditioning and Refrigeration Engineering	Diploma	UEE51211
Air-conditioning and Refrigeration	Certificate III	UEE32211

 COURSE ALSO DELIVERED ONLINE AT [TAFENSW.EDU.AU/DIGITAL](https://www.tafensw.edu.au/digital)






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READY TO BE AMBITIOUS?

TAFE NSW offers hundreds of courses, diplomas and degrees that you can study at any of our 130 locations around the state or in the comfort of your own home.

Call us on 131 601 to discuss what course might be right for you.

FIND OUT WHAT'S HAPPENING AT TAFE NSW ON:

-  facebook.com/tafensw
-  linkedin.com/school/tafe-nsw
-  youtube.com/tafe
-  twitter.com/tafensw
-  instagram.com/tafensw

TAKE THE NEXT STEP AND ENROL OR APPLY AT TAFE NSW TODAY.

Phone **131 601**

Email **courses@tafensw.edu.au**

Visit **tafensw.edu.au**

KEY DATES

SEMESTER 1 - 2021:

Term 1: 1 February - 4 April

Term 2: 19 April - 20 June

SEMESTER 2 - 2021:

Term 3: 12 July - 19 September

Term 4: 4 October - 28 November

Note: Dates are subject to change. Please check tafensw.edu.au for current information.



Nationally Recognised Training is an accredited program of study that leads to vocational qualifications and credentials that are recognised across Australia. Only registered training organisations that meet government quality standards can provide nationally recognised training. It includes accredited courses and endorsed training package qualifications.

This guide provides a snapshot of courses and programs planned to be offered by TAFE NSW in 2021. The information is correct at the time of printing (July 2020); however, because our courses are constantly updated in response to changing industry and community needs, it is possible some changes have occurred.

