



Electrotechnology and Energy

Electrical Trades, Air Conditioning and Refrigeration influence almost every aspect of daily life. The digital age continues to create an unprecedented demand for electricians specialising in construction in telecommunications, instrumentation, security and electronic control systems. 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 post trade studies and a degree.



Job opportunities[^]

The Electrotechnology industry in Australia employs over 352,000 people in a wide range of sectors including mining, manufacturing, communications, construction, renewables, refrigeration, and air-conditioning. The sector is forecast to create more than 24,400 jobs by 2026.

Employment numbers for Electrotechnology and Telecommunications Trades Workers are forecast to grow by 13,700 (or 6.1%) over the five years through November 2026. The sector is expected to create more than 14,500 jobs for electricians



Strong industry connections

TAFE NSW maintains partnerships with Transport for NSW, as well as peak industry bodies including the Master Electricians Australia and the Australian Institute of Refrigeration, Air Conditioning and Heating.



Annual growth¹

Employment across the sector is expected to have an annualised growth rate of 7.1%.

Qualifications you can earn at TAFE NSW

At TAFE NSW, you'll learn all you need to make a career in electrotechnology from industry expert teachers in specialised facilities. From certificates to advanced diplomas, there's a course to help you further your career in this energetic field.

Course	Code	Duration
Certificate II in Electrotechnology (Career Start)	UEE22020	6 months
Certificate II in Electronics	UEE21920	1 year PT
Certificate III in Air-conditioning and Refrigeration	UEE32211*	4 years
Certificate III in Appliance Service	UEE32120	3 years
Certificate III in Electronics and Communications	UEE30920	3 years
Certificate III in Electrotechnology Electrician	UEE30820	4 years
Certificate III in Electrical Fitting	UEE33020	3-4 years
Certificate III in Instrumentation and Control	UEE31220	3 years
Certificate III in Security Equipment	UEE31420	2 years PT

Course	Code	Duration
Certificate IV in Electrical - Instrumentation	UEE40420	2 years PT
Certificate IV in Industrial Electronics and Control	UEE40920	36 weeks
Certificate IV in Instrumentation and Control	UEE42220	2 years PT
Diploma of Air-conditioning and Refrigeration Engineering	UEE51220	2 years
Diploma of Electrical Engineering	UEE50420	2 years
Advanced Diploma of Electrical - Engineering	UEE62211*	1 year
Advanced Diploma of Engineering Technology - Electrical	UEE62111*	2 years

Duration for Certificate IV and above varies depending on how many hours they do per week. PT= part time

Fees for your course

A range of criteria apply for course fees, access to government subsidised training, student loans, payment by instalment, fee concessions, and fee exemptions that are available to eligible students. The training for all or some of the courses listed is subsidised by the NSW Government under Smart and Skilled funding. Visit tafensw.edu.au/enrol/fees.

* This course is superseded. You can still enrol in this course, and you will be contacted if you need to transition into the next version when it is available. ^ Source: AIS Electrotechnology Industry Outlook 2022, www.australianindustrystandards.org.au/industries/electrotechnology accessed 28 July 2022, LMI 2022 labourmarketinsights.gov.au/media/jlyh5cnz/2021-nsc-employment-projections.xlsx], 1 Source: AIS Electrotechnology Industry Outlook 2021 www.australianindustrystandards.org.au/wp-content/uploads/2021/06/20210609_UEE_10.pdf

Electrotechnology and Energy

Short courses you can study at TAFE NSW

TAFE NSW has a selection of short courses available to study, that can help you build the essential electrotechnology and energy skills needed to kickstart and grow your career, or to help you round out your résumé.

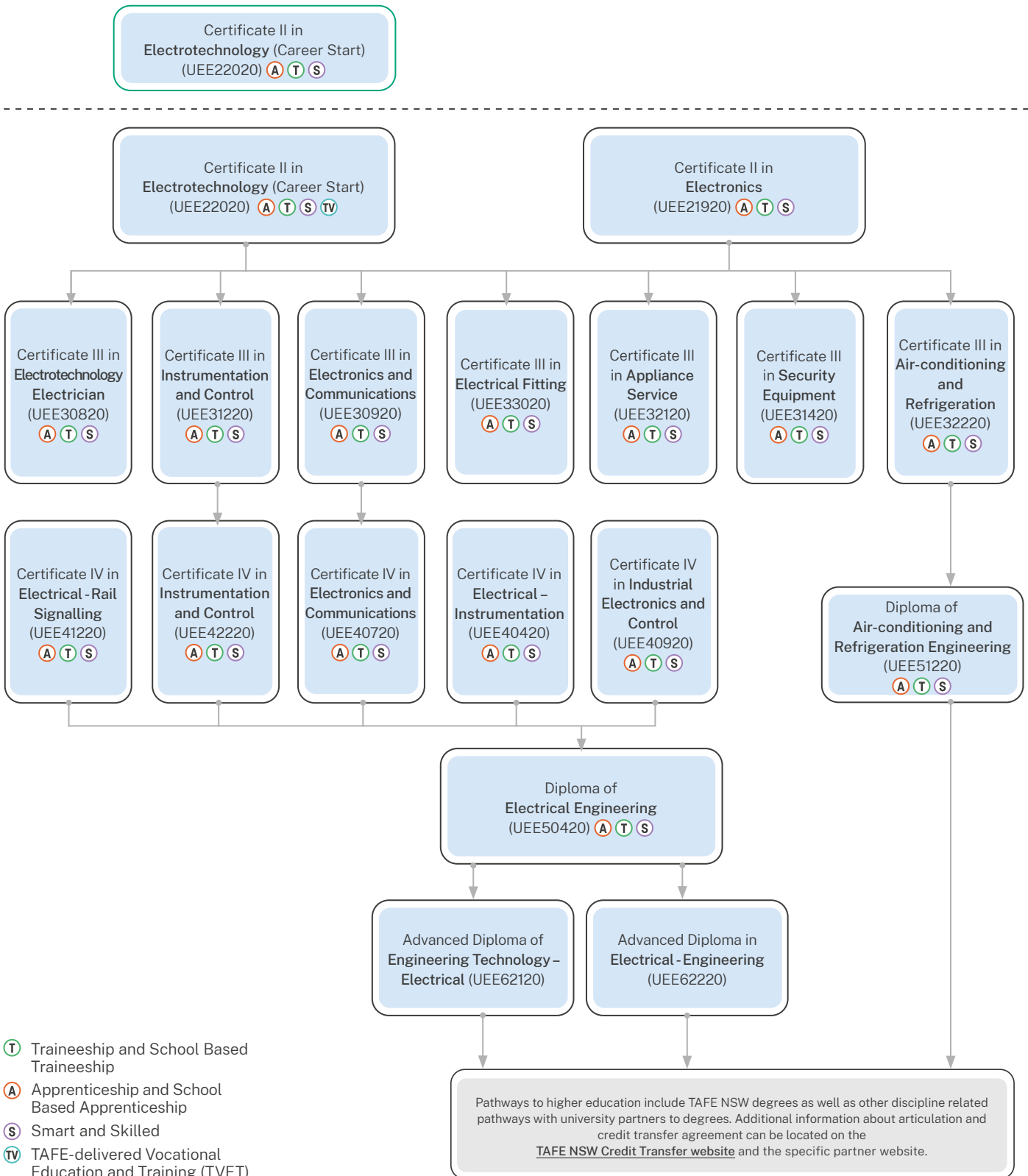
Short Course	Code [^]	Duration	Included Units of Study
Statement Of Attainment in Design and Install Grid Connected Battery Storage Systems.	900-81288	1 week	UEERE4001 Install, maintain and fault find battery storage systems for grid connected photovoltaic systems. UEERE5001 Design battery storage systems for grid connected photovoltaic systems.
Statement Of Attainment in Design and Install Grid Connected Photovoltaic Systems	900-80934	26 weeks	UEENEEK125A* Solve basic problems in photovoltaic energy apparatus and systems UEENEEK135A* Design grid connection photovoltaic power supply systems UEENEEK148A* Install, configure and commission LV grid connected photovoltaic power systems
Statement Of Attainment in Electrical Contracting and Estimating	900-81974	26 weeks	UEENEEC003B* Provide quotations for installation or service jobs. UEENEEC005B* Estimate electrotechnology projects. UEENEEC006B* Prepare tender submissions for electrotechnology projects. UEENEEE084A* Write specifications for electrotechnology engineering projects.
Statement Of Attainment in Esi Refresher-Accredited Service Providers	900-82056	1 day	UETTDRRF09 Apply access procedures to work on or near electrical network infrastructure. UETTDRRF01 Apply ESI safety rules, codes of practice and procedures for work on or near electrical apparatus. UETTDRRF08 Perform EWP Controlled descent escape. UETTDRRF03 Perform EWP rescue. UETTDRRF02 Perform pole top rescue. UETTDRRF06 Perform rescue from a live LV panel. HLTAID009 Provide cardiopulmonary resuscitation. UETTDRRF10 Provide first aid in an ESI environment UETTDRRF11 Testing of connections to low voltage electrical networks.
Statement of Attainment in Designing Grid Connected Photovoltaic Systems.	900-80935	20 weeks	UEENEEK125A* Solve basic problems in photovoltaic energy apparatus and systems. UEENEEK135A* Design grid connected photovoltaic power supply systems.
Statement Of Attainment in Restricted-Electrical Safety Testing of Electrical Cord Connected Equipment and Cord Assemblies	UEESS00098*	40 weeks	UEENEEE101A* Apply occupational health and safety regulations, codes and practices in the workplace. UEENEEP026A* Conduct in-service safety testing of electrical cord connected equipment and cord assemblies.
TAFE Statement In Marine Engineer's Automation, Electronics and Electrical (AEE).	800-000476	6 weeks	800-000476A Operation & maintenance of marine electrical systems.
TAFE Statement in Regulatory Safety Refresher II	800-000326	1 day	800-0326W Ausgrid Safety Rules 800-0326Y Endeavour Energy Safety Rules 800-0326X Essential Energy Safety Rules

[Visit our website for more short courses.](#)

* This course is superseded. You can still enrol in this course, and you will be contacted if you need to transition into the next version when it is available.

How you can grow your career

When you study with TAFE NSW, there are any number of courses that lead to an even greater number of career opportunities. However, before you can earn certain qualifications, you may have to complete some pre-requisite courses. Below are some examples of career progression pathways you could follow.



- T** Traineeship and School Based Traineeship
- A** Apprenticeship and School Based Apprenticeship
- S** Smart and Skilled
- TV** TAFE-delivered Vocational Education and Training (TVET)

For more information contact 131 601

TVET (SCHOOL) | ENTER DIRECTLY AT ANY POINT | CONDITIONAL ENTRY